Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



Name	Him a = V
Rural Route or Street No	Ju. 8 6 EB 25 1919
City or Town	45 noultain
$State__$	

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture.

Washington, D. C., January 31, 1919.

MONTHLY LIST OF PUBLICATIONS.

[JANUARY, 1919.]

READ CAREFULLY BEFORE ORDERING.

EFSend no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

NOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale by the Superintendent of Documents, Government Printing Office, at 5 cents per copy unless otherwise noted.

Canada Thistle and Methods of Eradication. By Albert A, Hansen. Pp. 15, figs. 5. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1002.)

Suitable for general distribution.

Sweet Clover on Corn Belt Farms. By J. A. Drake, Agriculturist, and J. C. Rundles, Scientific Assistant. Pp. 28, fig. 9. Contribution from the Office of Farm Management. (Farmers' Bulletin 1005.)

Cropping systems are outlined for the composition of different types, and special attention is called to the three essentials of success in growing the crop—lime, inoculation, and scarified seed.

Practical Hints on Running a Gas Engine. By A. P. Yerkes, Assistant Agriculturist. Pp. 16. Contribution from the Office of Farm Management. (Farmers' Bulletin 1013.)

Suitable for general distribution among unexperienced operators of gas engines.

Producing Family and Farm Supplies on the Cotton Farm. By C. L. Goodrich, Agriculturist. Pp. 16. Contribution from the Office of Farm Management. Farmers' Bulletin 1015)

This bulletin suggests ways in which southern farmers may make the most of opportunities for the home production of commodities that otherwise would necessitate cash outlay.

The Sweet Potato Weevil and Its Control. By F. H. Chittenden, Entomologist in Charge of Truck-Crop Investigations. Pp. 24, figs. 13. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1020.)

Especially suitable for distribution in the Gulf States.

103174°-19

DEPARTMENTAL BULLETINS-TECHNICAL.

The publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

The Significance of the Colon Count in Raw Milk. By S. Henry Ayers and Paul W. Clemmer, Bacteriologists, Dairy Division. Pp. 35, pls. 3, fig. 1. Contribution from the Bureau of Animal Industry. (Professional Paper.) Dec. 30, 1918. (Department Bulletin 739.) Price, 10 cents.

Of interest to dairymen, pure food and health officials, and dealers in milk.

A Study of Some of the Chemical Changes Which Occur in Oysters During Their Preparation for the Market. By Edward E. Smith, Junior Chemist. Pp. 24. Contribution from the Bureau of Chemistry. Jan. 13, 1919. (Department Bulletin 740.) Price, 5 cents.

This bulletin gives the results of an investigation to determine the amounts of ammoniacal nitrogen, amino-acid nitrogen, moisture, total solids, ash, and sodium chlorid present in oysters under the various conditions which they pass in ordinary commercial practice in the oysterhouse, and to ascertain the effect of washing and soaking on both the chemical composition and physical condition of the oysters.

Production of American Egyptian Cotton. By C. S. Scofield, T. H. Kearney, C. J. Brand, O. F. Cook, and W. T. Swingle. Pp. 30. Contribution from the Bureau of Plant Industry. Jan. 15, 1919. (Department Bulletin 742.) Price, 5 cents.

A partial revision of Department Bulletin No. 332, and description of the production and handling of this cotton as community action.

Cooling Milk and Storing and Shipping It at Low Temperatures. By James A. Gamble, Market Milk Specialist, and John T. Bowen, Technologist, Dairy Division. Pp. 28, figs. 21. Contribution from the Bureau of Animal Industry. (Professional Paper.) Jan. 17, 1919. (Department Bulletin 744.) Price, 10 cents.

No copies available for free distribution.

Chopped Soapweed as Emergency Feed for Cattle on Southwestern Ranges. By C. L. Forsling, Grazing Examiner. Pp. 20, pls. 4. Contribution from the Forest Service. Jan. 20, 1919. (Department Bulletin 745.) Price, 5 cents.

Of interest to those engaged in raising live stock on the Southwestern ranges.

The Economical Use of Fuel in Milk Plants and Creameries. By John T. Bowen, Technologist, Dairy Division. Pp. 47, figs. 14. Contribution from the Bureau of Animal Industry. Jan. 9, 1919. (Department Bulletin 747.) Price, 10 cents.

Of interest to operators of creameries and milk plants.

Farm Practice in Growing Sugar Beets in Michigan and Ohio. By R. S. Washburn, L. A. Moorehouse, and T. H. Summers, Office of Farm Management, and C. O. Townsend, Bureau of Plant Industry. Pp. 45, figs. 23. Contribution from the Office of Farm Management and Bureau of Plant Industry. (Professional Paper.) Jan. 28, 1919. (Department Bulletin 748.) Price, 10 cents.

Of interest to sugar-beet growers generally.

- Pecan Rosette in Relation to Soil Deficiencies. By S. M. McMurran, Assistant Pathologist. Pp. 11, figs. 4. Contribution from the Bureau of Plant Industry. Jan. 29, 1919. (Department Bulletin 756.) Price, 5 cents. Of interest to all pecan growers.
- Pulpwood Consumption and Wood-Pulp Production in 1917. By Franklin H. Smith, Statistician in Forest Products. Pp. 19. Contribution from the Forest Service. (Professional Paper.) Jan. 30, 1919. (Department Bulletin 758.) Price, 5 cents.

A discussion of the pulp-wood situation, and of interest to users of news-print paper.

MISCELLANEOUS.

- The Work of the Umatilla Reclamation Project Experiment Farm in 1917. By R. W. Allen, Farm Superintendent. Pp. 30, figs. 5. January, 1919. (W. I. A. Circ. 26, Bureau of Plant Industry.) Price, 5 cents.
- Agricultural Production for 1919, with Special Reference to Crops and Live Stock. Pp. 27. Jan. 23, 1919. (Circular 125, Office of the Secretary.) A resume of existing conditions and statement as to food requirements for 1919-20.

Relations of Dehydration to Agriculture. By Maj. S. C. Prescott, Bureau of Chemistry. Pp. 11. Jan. 25, 1919. (Circular 126, Office of the Secretary.) Price, 5 cents.

An address before the National Association of Commissioners of Agriculture at Baltimore, Md., Jan. 7, 1919.

SERIALS.

- Journal of Agricultural Research. (For sale only.) Vol. 15, No. 7. Nov. 18, 1918. Contents: Physiological Studies of Normal and Blighted Spinach. (qg G-162.) By Rodney H. True, Otis F. Black, James W. Kelly, H. H. Bunzell, Lon A. Hawkins, Samuel L. Jodidi, and Edward H. Kellogg.— Further Studies on Brisket Disease. (qi Colo.—2.) By George H. Glover and I. E. Newsom.—Observations on an Outbreak of Favus. (px Wis.—14.) By B. A. Beach and J. G. Halpin. Pp. 371—418, pls. 4. Price, 20 cents.
- Same, Vol. 15, No. 8. Nov. 25, 1918. Contents: Contribution to the Biology of Fruit-Fly Parasites in Hawaii. (qh K-73.) By C. E. Pemberton and H. F. Willard.—Observations and Experiments on Intestinal Trichine. (qj A-44.) By Benjamin Schwartz. Pp. 419-482, pl. 1, figs. 44. Price, 20 cents.
- Same, Vol. 15, No. 9. Dec. 2, 1918. Contents: Experiments on the Value of Greensand as a Source of Potassium for Plant Cultúre. (qk G-172.) By Rodney H. True and Fred W. Geise.—Effect of Farm Manure in Stimulating the Yields of Irrigated Field Crops. (gl G-164.) By C. S. Scofield.—Relation of Inorganic Soil Colloids to Plowsole in Citrus Groves in Southern California. (qm G-165.) By Charles A. Jensen. Pp. 483-519, pls. 2. Price, 15 cents.
- Same, Vol. 15, No. 10. Dec. 9, 1918. Contents: Seedling Diseases of Conifers. (qo G-166.) By Carl Hartley, T. C. Merrill, and Arthur S. Rhoads.—Histological Studies on Potato Leafroll. (qn G-167.) By Ernst F. Artschwager. Pp. 521-570, pls. 13. Price, cents.

PNOTE.—Beginning with volume 5 the Journal of Agricultural Research has been issued weekly and is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$3 per year, 52 numbers.

Experiment Station Record. Vol. 39, No. 4. September, 1918. E. W. Allen, Ph. D., Editor. Pp. 301-400. Price, 15 cents.

Same, Vol. 39, No. 5. October, 1918. Pp. 401-500. Price, 15 cents.

Same, Vol. 39, No. 6. Abstract Number. Jan. 14, 1919. Pp. 501-600. Price, 15 cents.

Same, Vol. 39, No. 7. November, 1918. Pp. 601-700. Price, 15 cents.

PROTE.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution, and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

The Monthly Crop Report. Vol. 5, No. 1. January, 1919. Pp. 1-8. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

SERVICE AND REGULATORY ANNOUNCEMENTS-FOR SALE ONLY.

These contain only information, instructions, and notices governing the enforcement of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.

Bureau of Animal Industry. No. 139. November, 1918. Pp. 89-99. Price, 5 cents.

Federal Horticultural Board. No. 57. October-November, 1918. Pp. 90-119. Price, 5 cents.

Bureau of Markets. No. 41. Pp. 16, pls. 7. Official Cotton Standards of the United States for American Egyptian Cotton. Jan. 20, 1919. Price, 5 cents.

SOIL SURVEYS.

APAll requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

- Soil Survey of Monroe County, Alabama. By Howard C. Smith and Austin L. Patrick, of the U. S. Department of Agriculture, and J. F. Stroud, of the Alabama Department of Agriculture and Industries. Pp. 53, figs. 2, map. (From F. O. Soils, 1916.) Price, 15 cents.
- Report on a Reconnaissance of the Soils, Agriculture, and Other Resources of the Kenai Peninsula Region of Alaska. By Hugh H. Bennett. Pp. 142, pls. 35, fig. 1, maps 3. (From F. O. Soils, 1916.) Price, 25 cents.
- Soil Survey of Porter County, Indiana. By T. M. Bushnell, of the U. S. Department of Agriculture, In Charge, and Wendell Barrett, of the Indiana Department of Geology. Pp. 47, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.
- Soil Survey of Cleveland County, North Carolina. By E. S. Vanatta, of the U. S. Department of Agriculture, and F. N. McDowell, of the North Carolina Department of Agriculture. Pp. 37, pls. 2, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.
- Soil Survey of Payne County, Oklahoma. By W. B. Cobb and H. W. Hawker. Pp. 39, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.
- Soil Survey of Windsor County, Vermont. By J. A. Kerr, In Charge, and Grove B. Jones. Pp. 24, fig. 1, map (From F. O. Soils, 1916.) Price, 15 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 46, No. 10. October, 1918. [Jan. 7, 1919.] Pp. 445–496, figs. 17, charts 9. Price, 25 cents per copy, \$2.50 per year. Payable to the Superintendent of Documents.

Special Articles: Solar and sky radiation during October, 1918. By H. H. Kimball.—Halo phenomena observed during October, 1918. By W. R. Gregg.—Forecasting service for aviators begins.—A much-needed change of emphasis in meteorological research. By W. S. Franklin.—Dynamic heating of air as a cause of hot volcanic blasts. By G. N. Cole.—Smoke as an indicator of gustiness and convection. By P. W. Etkes and C. F. Brooks.—The structure of gusts. By C. C. Turner.—A Virginian tornado. By A. W. Giles.—Abnormal change of air temperature at Tokyo and Sinagawa. By K. Sigetomi.—Major controls of the United States. By R. DeC. Ward.

- National Weather and Crop Bulletin, No. 1, January, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly, on Wednesday, April to October; monthly remainder of year. Price, 25 cents a year.
- Snow and Ice Bulletins for January 7, 14, 21, 28, 1919. These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected cooperative observers. Price, 25 cents a year.

EDWY B. REID, Chief, Division of Publications. Rural Route or Street No_____ City or Town____

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

WASHINGTON, D. C., February 28, 1919.

MONTHLY LIST OF PUBLICATIONS.

[FEBRUARY, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

Note.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy.

Growing Fruit for Home Use. By H. P. Gould, Pomologist, and George M. Darrow, Scientific Assistant, Horticultural and Pomological Investigations. Pp. 40, figs. 26. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1001.)

This bulletin aims to furnish, in concise form, information that will be of practical help to the beginner in fruit growing.

Control of the Onion Thrips. By F. H. Chittenden, Entomologist in Charge, Truck-Crop Insect Investigations. Pp. 16, figs. 11. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1007.)

Of especial interest to commercial growers of onions.

Hay Stackers. How They May Be Used in the East and South to Save Labor. By H. B. McClure, Agriculturist. Pp. 23, figs. 13. Contribution from the Office of Farm Management. (Farmers' Bulletin 1009.) For distribution in territory where farm labor is scarce.

Propagation and Culture of the Date Palm. By Bruce Drummond, Assistant in Aboriculture. Pp. 23, figs. 10. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1016.)

Contains instructions for the rooting of date offshoots and for their subsequent care in the orchard.

107887°-19

Straining Milk. By Ernest Kelly and James A. Gamble, Dairy Division. Pp. 16, figs. 14. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1019.)

For general distribution.

Machinery for Cutting Firewood. By H. R. Tolley, Scientific Assistant. Pp. 16, figs. 5. Contribution from the Office of Farm Management. (Farmers' Bulletin 1023.)

This bulletin describes the different types of wood-sawing rigs, points out the advantages and disadvantages of each, gives information as to first cost and cost of operation, and offers suggestions as to how they may be operated most efficiently.

DEPARTMENTAL BULLETINS-TECHNICAL.

ATThe publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

Effect of Grazing Upon Aspen Production. By Arthur W. Sampson, Plant Ecologist. Pp. 29, pls. 5, figs. 7. Contribution from the Forest Service. (Professional Paper.) Feb. 7, 1919. (Department Bulletin 741.) Price, 10 cents.

Suggests methods of grazing stock to avoid damage to young aspen growth.

The Production and Conservation of Fats and Oils in the United States. By Herbert S. Bailey, Bureau of Chemistry, and B. E. Reuter, U. S. Food Administration. Pp. 48. Contribution from the Bureau of Chemistry. Feb. 10, 1919. (Department Bulletin 769.) Price, 10 cents.

A statement showing the possibilities of production and the necessity for same.

Motor Transportation for Rural Districts. By J. H. Collins, Investigator in Market Surveys. Pp. 32, figs. 5. Contribution from the Bureau of Markets. Jan. 29, 1919. (Department Bulletin 770.) Price, — cents.

A discussion of the possibilities of the motor truck as a medium for the transportation of farm produce to market.

A Study of the Effect of Storage, Heat, and Moisture on Pyrethrum. By W. S. Abbott, Scientific Assistant. Pp. 7. Contribution from the Bureau of Entomology. (Professional Paper.) Feb. 21, 1919. (Department Bulletin 771.) Price, 5 cents.

Gives results of experiments in the deterioration of pyrethrum under various conditions.

SERIALS.

- Journal of Agricultural Research. (For sale only.) Vol. 15, No. 11. Dec. 16, 1918. Contents: Bacteriological Studies on Alfalfa Silage. (qq Kans.-16.) By O. W. Hunter.—Brown Canker of Roses, Caused by Diaporthe umbrina. (qs G-168.) By Anna E. Jenkins.—Effect of Carbon Disulphid and Toluol upon Nitrogen-Fixing and Nitrifying Organisms. (qu Kans.-17.) By P. L. Gainey.—Multiple Pipette Holder for the Distribution of Serum for the Complement-Fixation Test. (qp A-45.) By Francois H. Reynolds. Pp. 571-618, pls. 3, figs. 9. Price, 20 cents.
- Same. Vol. 15, No. 12. Dec. 23, 1918. Contents: Parasitism, Morphology, and Cytology of Cronartium ribicola. (qr G-169.) By Reginald H. Colley.— Further data on the Susceptibility of Rutaceous Plants to Citrus-Canker. (qt G-170.) By H. Atherton Lee. Pp. 619-665, pls. 16, fig. 1. Price, 25 cents.
- Same. Vol. 16, No. 1. Jan. 6, 1919. Contents: Determination of Acidity and Titrable Nitrogen in Wheat with the Hydrogen Electrode. (qv Kans.-18.) By C. O. Swanson and E. L. Tague.—Ash Absorption by Spinach from Concentrated Soil Solutions. (qw G-171.) By Rodney H. True, Otis F. Black, and James W. Kelly. Pp. 1-25, figs. 8. Price, 5 cents.
- Same. Vol. 16, No. 2. Jan. 13, 1919. Contents: Nitrates, Nitrification, and Bacterial Contents of Five Typical Acid Soils as Affected by Lime, Fertilizer, Crops, and Moisture. (qx Ind.-5.) By H. A. Noyes and S. D. Conner.—Effect of Certain Ecological Factors on the Morphology of the Urediniospores of Puccinia graminis. (rb Minn. 35.) By E. C. Stakman and M. N. Levine. Pp. 27-77, pls. 9, figs. 2. Price, 25 cents.

- Same. Vol. 16, No. 3. Jan. 20, 1919. Contents: Variations and Mode of Secretion of Milk Solids. (qy Me-14.) By John W. Gowen.—New Biologic Forms of Pucinnia graminis. (ra Minn. 36.) By E. C. Stakman, M. N. Levine, and J. G. Leach. Pp. 79-105. Price, 5 cents.
- Same. Vol. 16, No. 4. Jan. 27, 1919. Contents: Influence of Salts on the Nitric-Nitrogen Accumulation in the Soil. (qz Utah–10.) By J. E. Greaves, E. G. Carter, and H. C. Goldthorpe. Pp. 107–135, figs. 4. Price, 5 cents.
- Same. Vol. 10, No. 13. Sept. 23, 1918. [February, 1919.] Contents and Index of Volume 10. Pp. i-iv, 649-658. Price, 10 cents.
- Same. Vol. 12, No. 12. Mar. 25, 1918. [February, 1919.] Contents and Index of Volume 12. Pp. i-xiv, 733-741. Price, 10 cents.

ssued weekly and is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$3 per year, 52 numbers.

The Monthly Crop Report. Vol. 5, No. 2. February, 1919. Pp. 9-24. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

SERVICE AND REGULATORY ANNOUNCEMENTS-FOR SALE ONLY.

of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.

- Bureau of Animal Industry. No. 140. Pp. 101-109. Feb. 17, 1919. Price, 5 cents.
- Federal Horticultural Board. No. 58. Pp. 121-128. Feb. 12, 1918. Price, 5 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 46, No. 11. November, 1918. [Feb. 4, 1919.] Pp. 497-547, figs. 12, charts 9. Price, 25 cents per copy, \$2.50 per year. Payable to the Superintendent of Documents.

Special Articles: Solar and sky radiation during November, 1918. By H. H. Kimball.—Some characteristics of the Marvin pyrheliometer. By P. D. Foote.—Halo phenomena observed during November. By W. R. Gregg.—The dustfalls of March, 1918. By A. N. Winchell and E. R. Miller.—Smoke from Minnesota forest fires. By H. Lyman.—Effects of hurricanes on the upper-air currents. By W. H. Pickering.—Ocean temperatures in long-range forecasting. By C. F. Brooks.—Ocean temperatures and seasonal weather. By Wm. E. Ritter and Geo. F. Mc-Ewen.—King Island weather: seasonal abnormalities in southern Australia. By C. Richardson.—Definitions of "mean," "average," and "normal." By C. F. Brooks.—Hourly duration of precipitation at Philadelphia. By G. W. Mindling.—Rainy days and rainfall probability in the United States. By R. DeC. Ward.—Ancient piedmont route of northern Mesopotamia. By E. C. Semple.—Past and present climates of our leading crop plants. By H. C. Cowles.

- National Weather and Crop Bulletin. No. 2, February, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly, on Wednesday, April to October; monthly remainder of year. Price, 25 cents a year.
- Snow and Ice Bulletins for February 4, 11, 18, 25, 1919. These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected cooperative observers. Price, 25 cents a year.

EDWY B. REID, Chief, Division of Publications.

Keep Your Liberty Bonds

The War Loan Organization of the Treasury Department has sent the following statement to all publications:

"Publications cooperating in the Victory Liberty Loan Campaign can be of material assistance by voluntarily publishing regularly some such invitation as the following:

Watch the Stock Peddlers

READERS: Get the names and addresses of all persons and companies offering you speculative or doubtful stocks and securities, particularly if in exchange for your Liberty Bonds or War Savings Stamps, with copies of their "literature." Mail them promptly for investigation to the

FEDERAL TRADE COMMISSION WASHINGTON, D. C.

HELP THE VICTORY LIBERTY LOAN

"Upon receipt of such information the Federal Trade Commission will call for full reports in proper cases. The Federal Trade Commission Act provides a penalty of a fine and / or imprisonment for those who fail or falsely report to the Commission. It may make public so much of the information obtained as may be in the public interest and it can prevent unfair methods of competition and misrepresentations in commerce."

Sign no armistice



with extravagance

Name	red erm erm date erm han erm euw erm erm un gan und ergi
Rural Route or Street No	
City or Town	
$State_ $	

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

WASHINGTON, D. C., March 31, 1919.

MONTHLY LIST OF PUBLICATIONS.

[MARCH, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His

office is not a part of the Department of Agriculture.

FARMERS' BULLETINS—FOR FREE DISTRIBUTION.

**PNOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy.

- Sweet Potato Growing. By Fred E. Miller, Assistant Horticulturist, Office of Horticultural and Pomological Investigations. Pp. 30, figs. 22. Contributions from the Bureau of Plant Industry. (Farmers' Bulletin 999.) Suitable for general distribution.
- How to Control Billbugs Destructive to Cereal and Forage Crops. By A. F. Satterthwait, Scientific Assistant, Cereal and Forage Insect Investigations. Pp. 23, figs. 24. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1003.)

Suitable for general distribution.

- The Larger Corn Stalk-Borer. By George G. Ainslie, Entomological Assistant, Cereal and Forage Insect Investigations. Pp. 12, figs. 7. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1025.)
 Supersedes Farmers' Bulletin 634, and suitable for distribution in the South Atlantic States.
- Operating a Cooperative Motor Truck Route. By H. S. Yohe, Assistant in Market Surveys. Pp. 24, figs. 3. Contribution from the Bureau of Markets. (Farmers' Bulletin 1032.)

Describes the method of forming the association and the problems to be met, also benefits to be derived from it.

Growing Sugar Cane for Sirup. By P. A. Yoder, Sugar Cane Technologist. Pp. 35, figs. 15. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1034.

For distribution in the South Atlantic and Gulf Coast States.

The Farm Tractor in the Dakotas. By Arnold P. Yerkes, Agriculturist, and L. M. Church, Assistant in Farm Accounting. Pp. 32. Contribution from the Office of Farm Management. (Farmers' Bulletin 1035.)

Discusses benefits derived from the use of farm tractors in the Dakotas, with information as to size, cost, and amount of work performed. Of interest to all persons contemplating the purchase of a tractor.

Illustrated Poultry Primer. By Harry M. Lamon and Jos. Wm. Kinghorne, Animal Husbandry Division. Pp. 25, il. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1040.)

The object of this bulletin is to give, by means of photographs and brief statements, the fundamentals underlying the production of poultry.

The Eelworm Disease of Wheat and Its Control. By Luther P. Byars, Pathologist, Office of Cotton, Truck, and Forage Crop Disease Investigations. Pp. 10, figs. 10. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1041.)

For general distribution, especially in Virginia, West Virginia, Maryland, Georgia, and California.

The City Home Garden. By W. R. Beattie, Horticulturist, Office of Horticultural and Pomological Investigations. Pp. 39, figs. 16. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1044.)

For general distribution.

DEPARTMENTAL BULLETINS-TECHNICAL.

In the publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

The Tobacco Beetle: An Important Pest in Tobacco Products. By G. A. Runner, Entomological Assistant. [With Technical Descriptions of Coleopterous larvæ. By Adam G. Böving.] Pp. 77, pls. 4, figs. 16. Contribution from the Bureau of Entolomogy. (Professional Paper.) Mar. 17, 1919. (Department Bulletin 737.) Price, 20 cents.

Describes the life history and food habits of this insect and suggests method for

- The Use of Wood for Fuel. Compiled by the Office of Forest Investigations. Pp. 40, pls. 5, fig. 1. Contribution from the Forest Service. Mar. 10, 1919. (Department Bulletin 753.) Price, 10 cents.

 For general distribution.
- Geographical Phases of Farm Prices: Oats. By L. B. Zapoleon, formerly of the Division of Crop Records. Pp. 28, maps 3. Contribution from the Bureau of Crop Estimates. Mar. 19, 1919. (Department Bulletin 755.) Price, 10 cents.

A survey of the sectional differences throughout the United States in the producers' prices of oats.

Farm Practices in Grain Farming in North Dakota. By C. M. Hennis, Assistant Agriculturist, and Rex. E. Willard, Agriculturist. Pp. 35, figs. 17. Contribution from the Office of Farm Management. Mar. 25, 1919. (Department Bulletin 757.) Price, 10 cents.

Presents the results of over 350 records of grain production in 1912, 1913, and 1914 for 34 counties of North Dakota, with a summary of cost factors and a comparison of costs for 1917 with prewar costs.

Farm Practice in Growing Sugar Beets in Three California Districts. By T. H. Summers, L. A. Moorehouse, and R. S. Washburn, Office of Farm Management, and C. O. Townsend, Bureau of Plant Industry. Pp. 48, figs. 27. Contribution from the Bureau of Plant Industry and the Office of Farm Management. Mar. 14, 1919. (Department Bulletin 760.) Price, 10 cents.

Of interest to growers of sugar beets in California.

A Comparison of Roughages for Fattening Steers in the South. By W. F. Ward, Bureau of Annal Industry, Dan T. Gray, Alabama Polytechnic Institute, and E. R. Lloyd, Mississippi Experiment Station. Pp. 36, fig. 1. Contribution from the Bureau of Animal Industry. Mar. 12, 1919. (Department Bulletin 762.) Price, 5 cents.

Of especial interest to stock raisers in the Southern States.

Cold Storage Reports, Season 1917-1918. By John O. Bell, Assistant in Market Survey. Pp. 44. Contribution from the Bureau of Markets. March, 1919. (Department Bulletin 776.)

Covers apples, butter, American cheese, eggs, and poultry.

The Field Testing of Copper-Spray Coatings. By J. R. Winston, Assistant Pathologist, and H. R. Fulton, Pathologist, Office of Fruit-Disease Investigations. Pp. 9, figs. 4. Contribution from the Bureau of Plant Industry.

(Professional Paper.) Mar. 13, 1919. (Department Bulletin 785.) Price, 5 cents.

Of interest to pathological investigators, agricultural experts, and commercial growers of fruits.

MISCELLANEOUS.

- Irrigation Under the Provisions of the Carey Act. By Guy Ervin. Junior Irrigation Engineer, Bureau of Public Roads. Pp. 14. February, 1919. (Circular 124, Office of the Secretary.) Price, 5 cents.
 - A description of the Carey Act and a statement of the progress made under its provisions.
- The "17-Year Locusts" in 1919. Bureau of Entomology. Pp. 10. Feb. 24, 1919. (Circular 127, Office of the Secretary.)
- Regulations Governing Entrance to the Veterinary-Inspector Examination. Promulgated by the Secretary of Agriculture and approved by the President of the Civil Service Commission to indicate the requirements as to veterinary schools and colleges whose graduates are admitted to examinations for veterinary inspectors in the Bureau of Animal Industry. Effective on and after September 5, 1918. Pp. 11. [March, 1919.] (Circular 128, Office of the Secretary.) Price, 5 cents.
- Private Forestry. By Henry S. Graves, Forester. Pp. 11. March, 1919. (Circular 129, Office of the Secretary.) Price, 5 cents.
 - An address before the New England Forestry Conference, Boston, February 24, 1919.
- Address of D. F. Houston, Secretary of Agriculture, before the Trans-Mississippi Readjustment Congress, Omaha, Nebraska, February 20, 1919. (Circular 130, Office of the Secretary.) Price, 5 cents.
- Address of D. F. Houston, Secretary of Agriculture before the Joint Conference of the Agricultural Commission of the American Bankers' Association and the Agricultural Committees of the State Bankers' Associations, Washington, D. C., February 26, 1919. Pp. 11. March, 1919. (Circular 131, Office of the Secretary.) Price, 5 cents.
- Report of the Committee Appointed by the Secretary of Agriculture to Consider Plan of Organization, Scope of Work, and Projects for the Office of Farm Management and Methods of Procedure in Making Cost of Production Studies. Pp. 15. (Circular 132, Office of the Secretary.) Price, 5 cents.
- Address of D. F. Houston, Secretary of Agriculture, before the Governors' Conference, Annapolis, Md., Dec. 16, 1918. Pp. 15. March, 1919. (Circular 133, Office of the Secretary.) Price, 5 cents.
- Annual Report of the Governor of Alaska on the Alaska Game Law, 1918. Pp. 14. Mar. 15, 1919. (Doc. 110, Bureau of Biological Survey.) Price, 5 cents.
- Report of the Alaska Agricultural Experiment Stations, 1917. Pp. 96, pls. 9. Mar. 15, 1919. Price, 15 cents.

SERIALS.

- Journal of Agricultural Research. (For sale only.) Vol. 16, No. 5. Feb. 3, 1919. Contents: Physoderma Disease of Corn. (rg G-163.) By W. H. Tisdale. Pp. 137-154, pls. 9. Price, 20 cents.
- Same, Vol. 16, No. 6. Feb. 10, 1919. Contents: Injury to Casuarina Trees in Southern Florida by the Mangrove Borer. (rf K-75.) By Thomas E. Snyder.—Life History Observations on Four Recently Described Parasites of Bruchophagus funebris. (rd-K75.) By Theodore D. Urbahas. Pp. 155-174, pls. 6, figs. 10. Price, 10 cents.
- Journal of Agricultural Research, Vol. 16, No. 7. Feb. 17, 1919. Contents: Cyanogenesis in Andropogon sorghum. (rk Okla.-1.) By C. T. Dowell.— Effect of Certain Compounds of Barium and Strontium on the Growth of Plants. (rh Ky.-7.) By J. S. McHargue. Pp. 175-194, pl. 1. Price. 10 cents.
- Same, Vol. 16, No. 8. Feb. 24, 1918. Contents: Apple-Scald. (rc G-173.) By Charles Brooks, J. S. Cooley, and D. F. Fisher.—Angular-Leafspot of Tobacco, An Undescribed Bacterial Disease. (rj Va. (Blackburg)-2.) By

- F. D. Fromme and T. J. Murray. Pp. 195-228, pls. 3, figs. 10. Price, cents.
- Same, Vol. 16, No. 9. Mar. 3, 1919. Contents: Two Species of Pegomyia Mining the Leaves of Dock. (rl N. Y. (Cornell) 4.) By S. W. Frost.—Influence of Foreign Pollen on the Development of Vanilla Fruits. (re B-15.) By T. B. McClelland.—A Blood-Destroying Substance in Ascaris Lumbricoides. (rj A-46.) By Benjamin Schwartz. Pp. 229-258, pls. 8, fig. 1. Price, cents.

RENOTE.—Beginning with volume 5 the Journal of Agricultural Research has been issued weekly and is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$3 per year, 52 numbers.

Experiment Station Record. Vol. 39, No. 8. December, 1918. E. W. Allen, Ph. D., Editor. Pp. 701-800. Price, 15 cents.

PNOTE.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution, and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

- Same, Vol. 39, No. 9. Abstract Number. Mar. 20, 1919. Pp. 801-900. Price, 15 cents.
- The Monthly Crop Report. Vol. 5, No. 3. March, 1919. Pp. 25-36. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

SEPARATES.

- Cattle Loans and Their Value to Investors. By Charles S. Cole, Bureau of Markets. Pp. 10. (Separate 764, Yearbook, 1918.) Price, 5 cents.
- The Place of Rye in American Agriculture. By Clyde E. Leighty, Bureau of Plant Industry. Pp. 17. (Separate 769, Yearbook, 1918.) Price, 5 cents.

 PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 46, No. 12. December, 1918. [Mar. 5, 1919.] Pp. 549-607, figs. 8, charts 35. Price, 25 cents per copy, \$2.50 per year, payable to the Superintendent of Documents

Special Articles: Solar and sky radiation during December, 1918. By H. H. Kimball.—Halo phenomena observed during December, 1918. By W. R. Gregg.—Halo observations at York, N. Y. By M. L. Stewart.—Lunar rainbow at Tatoosh, Wash. By R. C. Mize.—Wind aloft at Houston, Tex., Dec. 18, 1918. By I. R. Tannehill.—How meteorological instruction may be furthered. By R. Dec. Ward.—Collegiate instruction in meteorology. By C. F. Brooks.—A Signal Corps School of Meteorology. By O. L. Fassig.—Some recent contributions to the physics of the air. By W. J. Humphreys.—Notes on hurricanes of 1918. By C. A. Donnel.—Tropical cyclone of September 14-17, 1918, in the Pacific Ocean west of Mexico. By F. G. Tingley.—The cold winter of 1917-18. By P. C. Day.—Effects of cold weather, winter of 1917-18, on vegetation. By J. Warren Smith.

- Monthly Weather Review, Supplement No. 14. Aerology No. 9. I. Free-Air Data at Broken Arrow, Okla., Drexel, Nebr., Ellendale, N. Dak., and Royal Center, Ind., Aerological Stations. July. August, and September, 1918, inclusive. By the Aerological Division.—II. Broken Arrow Aerological Station. By John A. Reihle.—III. Royal Center Aerological Station. By Homer W. Ball. Pp. 132, figs. 22. Price, 25 cents.
- National Weather and Crop Bulletin. No. 3, March, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly, on Wednesdays, April to October; monthly remainder of year. Price, 25 cents a year.
- Snow and Ice Bulletins for March 4, 11, 18, 25, 1919. These bulletins are issued weekly during the winter season, based upon data from regular Weather Bureau stations, supplemented by reports from selected cooperative observers. Price, 25 cents a year.

EDWY B. REID, Chief, Division of Publications.

Name	
	What - was
Rural Route or Street No	
City or Town	
Stata	

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

WASHINGTON, D. C., April 30, 1919.

MONTHLY LIST OF PUBLICATIONS.

[APRIL, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

REPNOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy.

- A Simple Steam Sterilizer for Farm Dairy Utensils. By S. Henry Ayers and George B. Taylor, Dairy Division. Pp. 16, il. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 748, Revised.)

 For general distribution.
- The Woolly White Fly in Florida Citrus Groves. By W. W. Yothers, Entomological Assistant, Tropical and Subtropical Fruit Insect Investigations. Pp. 14, figs. 8. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1011.)

Describes the life history and habits of this insect and suggests methods for its control.

Strawberry Culture: South Atlantic and Gulf Coast Regions. By George M. Darrow, Scientific Assistant, Office of Horticultural and Pomological Investigations. Pp. 40, figs. 35. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1026.)

For distribution in the coastal plain region in the states of Texas, Louisiana, Mississippi, Alabama, Georgia, Florid, North and South Carolina, Virginia, and Arkansas.

Strawberry Culture: Western United States. By George M. Darrow, Scientific Assistant, Office of Horticultural and Pomological Investigations. Pp. 29, figs. 16. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1027.)

This bulletin applies to that part of the United States in which ordinary farm crops are grown largely under irrigation.

Strawberry Culture: Eastern United States. By George M. Darrow, Scientific Assistant, Office of Horticultural and Pomelogical Investigations. Pp. 50, figs. 18. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1028.)

Contains instructions for planting, cultivating, fertilizing, harvesting and marketing, and methods of canning and preserving the fruit.

Conserving Corn from Weevils in the Gulf Coast States. By E. A. Back, Entomologist in Charge of Stored-Product Insect Investigations. Pp. 36, figs. 21. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1029.)

For distribution among corn growers in the southern states especially.

Feeding Horses. By G. A. Bell and J. O. Williams, Animal Husbandry Division. Pp. 24. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1030.)

This bulletin explains the computation of rations for horses, suggests certain feed combinations which approximately meet the needs of horses under differing conditions, and reviews such factors of feeding as tend to make the horse more efficient.

Fig Growing in the South Atlantic and Gulf States. By H. P. Gould, Pomologist, Horticultural and Pomological Investigations, with contributions from others. Pp. 47, figs. 24. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1031.)

This bulletin describes the varieties of figs most suitable for the South Atlantic and Gulf States, tells how to grow them and protect them from diseases and insects, and suggests methods of making them into desirable products for the table.

Muscadine Grape Paste. By Charles Dearing, Assistant Horticulturist, Office of Horticultural and Pomological Investigations. Pp. 15. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1033.)

Gives directions for securing suitable fruit, the extraction of the pulp, and the sweetening, cooking, drying, and storing of the product, as well as the making of various combinations, fancy pastes, and pastes from other fruits.

Care and Repair of Farm Implements. No. 5. Grain Separators. By Elmer Johnson, Assistant Mechanical Engineer. Pp. 20, figs. 3. Contribution from the Bureau of Public Roads. (Farmers' Bulletin 1936.)

This bulletin gives instructions for overhauling and adjusting separators which will reduce to the minimum the losses and delays from breakdowns during the operating season.

Strawberry Varieties in the United States. By George M. Darrow, Scientific Assistant, Office of Horticultural and Pomological Investigations. Pp. 36, figs. S. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1043.)

This bulletin is intended as an aid to strawberry growers in the selection of varieties best suited to their needs and conditions.

The European Corn Borer, a Menace to the Country's Corn Crop. By D. J. Caffrey, Scientific Assistant, Cereal and Forage Insect Investigations. Pp. 28, figs. 17. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1046.)

Describes the life history and habits of this insect, and suggests methods of control and eradication.

DEPARTMENTAL BULLETINS-TECHNICAL.

The publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prempt receipt, remit price to the Superintendent of Documents.

Digestibility of Certain Miscellaneous Animal Fats. By Arthur D. Holmes, Specilaist in Charge of Digestion Experiments, Office of Home Economics. Pp. 25. Contribution from the States Relations Service. (Professional Paper.) Apr. 25, 1919. (Department Bulletin 613.) Price, 5 cents.

Deals with the digestibility of goat's butter, kid fat, hard palate fat, herse fat, oleo cil, oleo stearin, ox-marrow, ox-tail, and turtle fats.

The Avocado in Guatemala. By Wilson Popenoe, Agricultural Explorer, Office of Foreign Seed and Plant Introduction. Pp. 69, pls. 22. Contribution from the Bureau of Plant Industry. Apr. 17, 1919. (Department Bulletin 743.) Price, 30 cents.

Of interest to dealers in and growers of this fruit.

The Sugar-Cane Moth Borer. By T. E. Holloway and U. C. Loftin, Entomological Assistants, Southern Field Crop Insect Investigations, with Technical Descriptions by Carl Heinrich. Pp. 74, pls. 9, figs. 12. Contribution from the Bureau of Entomology. (Professional Paper.) Apr. 18, 1919. (Department Bulletin 746.) Price, 20 cents.

Of interest to growers of sugar cane generally.

Production of Goats on Far Western Ranges. By W. R. Chapline, Grazing Examiner. Pp. 35, pls. 12, figs. 2. Contribution from the Forest Service. (Professional Paper. Apr. 30, 1919. (Department Bulletin 749.) Price, 15 cents.

Describes the proper methods of managing goat herds on western ranges in order to produce profitable returns without damaging timber reproduction.

Experiments on the Digestibility of Wheat Bran in a Diet Without Wheat Flour. By Arthur D. Holmes, Specialist in Charge of Digestion Experiments, Office of Home Economics. Pp. 20. Contribution from the States Relations Service. (Professional Paper.) Apr. 22, 1919. (Department Bulletin 751.) Price, 5 cents.

Results of experiments made to secure data on the digestibility of wheat that will be of value in determining the most economical and physiologically efficient method of utilizing wheat for human food.

The Utilization of Irrigated Field Crops for Hog Pasturing. By F. D. Farrel, formerly Agriculturist in Charge of the Office of Demonstrations on Reclamation Projects. Pp. 37, figs. 6. Contribution from the Bureau of Plant Industry and the Bureau of Animal Industry. Apr. 24, 1919. (Department Bulletin 752.) Price, 10 cents.

Of interest to all farmers on the various irrigation projects.

A Comparison of Concentrates for Fattening Steers in the South. By W. F. Ward and S. S. Jerdan, Animal Husbandry Division, Bureau of Animal Industry, and E. R. Lloyd, Director of Mississippi Experiment Station. Pp. 16. Contribution from the Bureau of Animal Industry. Apr. 7, 1919. (Department Bulletin 761.) Price, 5 cents.

A comparison of the values of different mixtures of cottonseed meal, cake, broken ear and shelled corn for fattening purposes.

Strains of White Burley Tobacco Resistant to Root-Rot. By James Johnson, Agent, and R. H. Milton, Assistant, Office of Tobacco Investigations. Pp. 11, figs. 4. Contribution from the Bureau of Plant Industry. Apr. 18, 1919. (Department Bulletin 765.) Price, 5 cents.

Describes the relation of root-rot to the cropping system, cause of the disease, and experiments in the development of strains resistant to root-rot.

Oak-Leaf Poisoning of Domestic Animals. By C. Dwight Marsh, Physiologist in Charge of Poisonous Plant Investigations, A. B. Clawson, Physiologist, and Hadleigh Marsh, Veterinary Inspector, Bureau of Animal Industry. Pp. 36, figs. 19. Contribution from the Bureau of Animal Industry. (Professional Paper.) Apr. 28, 1919. (Department Bulletin 767.) Price, 10 cents

Of interest to stock raisers and feeders generally.

- Production of Lumber, Lath, and Shingles in 1917. By Franklin H. Smith and Albert H. Pierson, Statisticians in Forest Products. Pp. 44, figs. 2. Contribution from the Forest Service. (Professional Paper.) Apr. 5, 1919. (Department Bulletin 768.) Price, 10 cents.
- Life History and Habits of the Mealy Plum Aphis. By W. M. Davidson, Scientific Assistant, Deciduous Fruit Insect Investigations. Pp. 16, pls. 2. Contribution from the Bureau of Entolomogy. (Professional Paper.) Apr. 28, 1919. (Department Bulletin 774.) Price, 5 cents.

Of interest to growers of plums, prunes, and apricots.

MISCELLANEOUS.

- Vanilla: A Promising New Crop for Porto Rico. By T. B. McClelland, Horticulturist. Pp. 32, pls. 3, figs. 4. Apr. 17, 1919. (Bulletin 26, Porto Rico Agricultural Experiment Station.) Price, 5 cents.
- A National Lumber and Forest Policy. By Henry S. Graves, Forester, Forest Service. Pp. 14. April, 1919. (Circular 134, Office of the Secretary.) Price, 5 cents.

Address before the American Lumber Congress, Chicago, April 16, 1919.

List of Workers in Subjects Pertaining to Agriculture, Home Economics, and Marketing, 1918-1919. Prepared in the States Relations Service. Pp. 162. Price, — cents.

Not available for free distribution.

- Report of the Hawaii Agricultural Experiment Station, 1918. Pp. 55, pls. 11. Price, 10 cents.
- Delicious Products of the Dairy. By J. C. McDowell, Bureau of Animal Industry. Pp. 11, il. (Department Circular 26.)

SERIALS.

- Journal of Agricultural Research. (For sale only.) Vol. 16, No. 10. Mar. 10, 1919. Contents: Solubility of the Lime, Magnesia, and Potash in Such Minerals as Epidote, Chrysolite, and Muscovite, Especially in Regard to Soil Relationships. (rn H-6.) By R. F. Gardiner.—A Field Study of the Influence of Organic Matter upon the Water-Holding Capacity of a Silt-Loam Soil. (ro Minn.-37.) By Frederick J. Alway and Joseph R. Neller. Pp. 259-278, pl. 1, fig. 2. (Price, 10 cents.
- Same, Vol. 16, No. 11. Mar. 17, 1919. Contents: Fusarium-Blight of Potatoes Under Irrigation. (rm G-174.) By H. G. MacMillan. Pp. 279-303, pls. 5. Price, 10 cents.
- Same, Vol. 16, No. 12. Mar. 24, 1919. Contents: Effect of Certain Grain Rations on the Growth of the White Leghorn Chick. (rp Ky.-8.) By G. Davis Buckner, E. H. Nollau, R. H. Wilkins, and Joseph H. Kastle.—Ammonification of Manure in Soil. (rr N. Y. (Geneva)-5.) By H. J. Conn and J. W. Bright. Pp. 305-350, pl. 1. Price, 10 cents.
- Same, Vol. 17, No. 1. Apr. 15, 1919. Contents: Meat Extracts, Their Composition and Identification (rq A-47), by James A. Emery and Robert R. Henley.—Quantity and Composition of Ewes' Milk: Its Relatiton to the Growth of Lambs (rt Idaho-2), by Ray E. Neidig and E. J. Iddings.—Seed Disinfection by Formaldehyde Vapor (rv O-3), by Cecil C. Thomas. Pp. 39, fig. 1. Price, 10 cents.

RENOTE.—Beginning with volume 5 the Journal of Agricultural Research has been issued weekly and is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$3 per year, 52 numbers.

The Monthly Crop Report. Vol. 5, No. 4. April, 1919. Pp. 37-44. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

- Experiment Station Record. Vol. 40, No. 1. January, 1919. E. W. Allen, Ph. D., Editor. Pp. 1-100 Price, 15 cents.
- Same, Vol. 40, No. 2. February, 1919. Pp. 101-200. Price, 15 cents.

pertaining to agriculture. It is not intended for general distribution and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

SERVICE AND REGULATORY ANNOUNCEMENTS-FOR SALE ONLY.

of the food and drugs act, meat inspection, 28-hour, and notices governing the enforcement of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.

- Bureau of Animal Industry. No. 143. March, 1919. Pp. 17-29. Apr. 30, 1919. Price, 5 cents.
- Bureau of Biological Survey. No. 27. Migratory Bird Treaty, Act, and Regulations. Convention between the United States and Great Britain for the protection of migratory birds in the United States and Canada. Pp. 11. Apr. 22, 1919. Price, 5 cents.

- Bureau of Chemistry. Supplement 55. [N. J. 6201-6250.] Pp. 239-291. Apr. 24, 1919. Price, 10 cents.
- Bureau of Chemistry. Supplement 56. [N. J. 6251-6300.] Pp. 293-343. Apr. 28, 1919. Price, 10 cents.
- Federal Horticultural Board. No. 60. February, 1919. Pp. 17-27. Apr. 7, 1919. Price, 5 cents.
- Insecticide and Fungicide Board. No. 24. Pp. 499-531. Apr. 21, 1919. Price, 5 cents.
- Bureau of Markets. No. 44. Pp. 124. Apr. 25, 1919. Price, 10 cents.

SOIL SURVEYS.

- All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.
- Soil Survey of Montgomery County, Iowa. By A. M. O'Neal, jr., of the U. S. Department of Agriculture, and L. L. Rhodes, of the Iowa Agricultural Experiment Station. Pp. 30, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of St. Martin Parish, Louisiana. By A. H. Meyer and B. H. Hendrickson. Pp. 32, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Calhoun County, Michigan. By R. F. Rogers and William G. Smith. Pp. 54, figs. 2, map. 1. (From F. O. Soils, 1916.) Price, 15 cents.
- Soil Survey of Covington County, Mississippi. By E. Malcolm Jones, of the Mississippi Geological Survey, and A. T. Sweet, of the United States Department of Agriculture. Pp. 40, pls. 2, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Callaway County, Missouri. By H. H. Krusekopf, of the University of Missouri, and J. H. Agee and R. H. Hall, of the U. S. Department of Agriculture. Pp. 38, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.
- Soil Survey of Phelps County, Nebraska. By B. W. Tillman, of the U. S. Department of Agriculture, and B. F. Hensel, of the Nebraska Soil Survey. Pp. 42, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Wayne County, Nebraska. By B. W. Tillman, of the U. S. Department of Agriculture, and B. F. Hensel, of the Nebraska Soil Survey. Pp. 50, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Mahoning County, Ohio. By M. W. Beck, of the U. S. Department of Agriculture, and Oliver P. Gossard, of the Ohio Agricultural Experiment Station. Pp. 41, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Clearfield County, Pennsylvania. By R. A. Winston and R. W. McClure, of the U. S. Department of Agriculture, and H. P. Cooper and David C. Wimer, of the Pennsylvania State College. Pp. 32, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.
- Soil Survey of Shelby County, Tennessee. By Hugh H. Bennett, Risden T. Allen, and L. Vincent Davis, of the United States Department of Agriculture, and C. R. Watkins, jr., of the Tennessee Geological Survey. Pp. 39, pls. 2, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.

SEPARATES.

- How Dairying Built Up a Community. By J. C. McDowell, Bureau of Animal Industry. Pp. 18, pls. 4. (Separate 765, Yearbook, 1918.) Price, 5 cents.
- The Farmer and Federal Grain Supervision. By Ralph H. Brown, Bureau of Markets. Pp. 15, pls. 4. (Separate 766, Yearbook, 1918.) Price, 5 cents.
- Following the Produce Markets. By G. B. Fiske, Bureau of Markets. Pp. 14, fig. 1. (Separate 768, Yearbook, 1918.) Price, 5 cents.

- Electric Light and Power from Small Streams. By A. M. Daniels, Bureau of Public Roads. Pp. 20, figs. 3. (Separate 770, Yearbook, 1918.) Price, 5 cents.
- The Thrashing Ring in the Corn Belt. By J. C. Rundles, Office of Farm Management. Pp. 24. (Separate 772, Yearbook, 1918.) Price, 5 cents.
- Live Stock and Reconstruction. By George M. Rommel, Bureau of Animal Industry. Pp. 16. (Separate 773, Yearbook, 1918.) Price, 5 cents.
- Composition and Food Value of Bottled Soft Drinks. By J. W. Sale and W. W. Skinner, Bureau of Chemistry. Pp. 10. (Separate 774, Yearbook, 1918.) Price, 5 cents.
- Some Effects of the War Upon the Seed Industry of the United States. By W. A. Wheeler and G. C. Edler, Bureau of Markets. Pp. 22, figs. 6. (Separate 775, Yearbook, 1918.) Price, 5 cents.
- The Old and the New in Corn Culture. By H. Howard Biggar, Bureau of Plant Industry. Pp. 16, pls. 4. (Separate 776, Yearbook, 1918.) Price, 5 cents.
- Less Cholera—More Hogs. By O. B. Hess. Bureau of Animal Industry. Pp. 6, pls. 2. (Separate 777, Yearbook, 1918.) Price, 5 cents.
- Better Poultry Through Community Breeding Associations. By J. W. Kinghorne. Bureau of Animal Industry. Pp. 8, pls. 4. (Separate 778, Yearbook, 1918.) Price, 5 cents.
- Farm Woodlands and the War. By Henry S. Graves, Forester, Forest Service. Pp. 12. (Separate 779, Yearbook, 1918.) Price, 5 cents.
- Home Mixing of Fertilizers. By C. C. Fletcher, Bureau of Soils. Pp. 8, fig. 1. (Separate 780, Yearbook, 1918.) Price, 5 cents.
- The Drainage Movement in the United States. By S. H. McCrory, Bureau of Public Roads. Pp. 10, pls. 6. (Separate 781, Yearbook, 1918.) Price, 5 cents.
- The Accredited-Herd Plan in Tuberculosis Eradication. By J. A. Kiernan, Bureau of Animal Industry. Pp. 8, pls. 2. (Separate 782, Yearbook, 1918.) Price, 5 cents.
- Some Results of Federal Quarantine Against Foreign Live-Stock Diseases. By G. W. Pope, Bureau of Animal Industry. Pp. 10, pls. 2. (Separate 783, Yearbook, 1918.) Price, 5 cents.
- Rabbit Growing to Supplement the Meat Supply. By Ned Dearborn, Bureau of Biological Survey. Pp. 10, pls. 2, fig. 1. (Separate 784, Yearbook, 1918.) Price, 5 cents.
- Federal Protection of Migratory Birds. By George A. Lawyer, Bureau of Biological Survey. Pp. 16, pls. 3, figs. 2. (Separate 785, Yearbook, 1918.) Price, 5 cents.
- How Weevils Get Into Beans. By E. A. Back, Bureau of Entomology. Pp. 10, pls. 3. (Separate 786, Yearbook, 1918.) Price, 5 cents.
- The Rediscovery of an Old Dish. By Herbert P. Davis, Bureau of Animal Industry. Pp. 10, pl. 1. (Separate 787, Yearbook, 1918.) Price, 5 cents.
- Housing the Worker on the Farm. By E. B. McCormick, Bureau of Public Roads. Pp. 12, figs. 8. (Separate 789, Yearbook, 1918.) Price, 5 cents.
- Sisal and Henequen as Binder-Twine Fibers. By H. T. Edwards, Bureau of Plant Industry. Pp. 12, pls. 4. (Separate 790, Yearbook, 1918.) Price, 5 cents.
- Statistics of Grain Crops, 1918. Pp. 60. (Separate 791, Yearbook, 1918.)
 Price, 10 cents.
- Statistics of Crops Other Than Grain Crops, 1918. Pp. 82. (Separate 792, Yearbook, 1918.) Price, cents.
- Imports and Exports of Agricultural Products. Pp. 41. (Separate 794, Year-book, 1918.) Price, 10 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 47, No. 1. January, 1919. [Apr. 7, 1919.] Pp. 1-64, figs. 22, charts 12. Price, 25 cents per copy, \$2.50 per year. Payable to the Superintendent of Documents.

Special Articles: Work of the Smithsonian Astrophysical Observatory at Calama, Chile. By C. G. Abbot.—Solar variations and terrestrial weather. By C. F. Marvin.—Solar radiation intensities, January, 1919. By H. H. Kimball.—Influence of the solar eclipse of June 8, 1918, upon radiation and other meteorological elements. By H. H. Kimball.—Halo observations, January, 1919. By W. R. Gregg.—Lunar halo and paraselenic circle observed at Colony, Wyo.—Southern California windstorm of Nov. 24–26, 1918. By F. A. Carpenter.—Terrific windstorm on Mount Wilson, Cal., Nov. 24–26, 1918. By W. P. Hoge.—A New airplane altitude record.—Evaporation in the Canal Zone. By H. G. Cornthwaite.—Evaporation compared with vapor pressure deficit and wind velocity. By E. S. Johnston.

National Weather and Crop Bulletin. Nos. 4, 5, 6, April, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly, on Wednesdays, April to October; monthly remainder of year. Price, 25 cents a year.

EDWY B. REID, Chief, Division of Publications.

brall

WATCH FOR THESE TWO PLANT ENEMIES.

Two plant enemies of a very serious nature have gotten into this country from Europe. They are the European corn borer and the European potato wart disease. At present both apparently are confined to a comparatively limited territory, but every precaution and the utmost care will be necessary to prevent their spread. Unless controlled they may become the most destructive enemies of two of America's greatest food crops. The corn borer now is known to exist only in Massachusetts and New York. It feeds on all parts of the corn plant and has an appetite for many garden and ornamental plants. Its presence is detected by broken tassels and with sawdust-like material at the breaks, and by holes in the stalk surrounded with the same sawdust-like material. The potato wart disease is now confined to a part of Pennsylvania. This disease is noticeable at harvest time. and is characterized by warty, spongy, cauliflowerlike growths on the underground portions of the plant. Write to the U.S. Department of Agriculture, Washington, D. C., for information on these plant enemies, and watch for them in new places.

Rural Route or Street No______ City or Town_____

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

WASHINGTON, D. C., May 31, 1919.

MONTHLY LIST OF PUBLICATIONS.

[MAY, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except these otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

RENOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy.

Currants and Gooseberries. By George M. Darrow, Scientific Assistant, Office of Horticultural and Pomological Investigations. Pp. 40, figs. 26. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1624.)

For general distribution.

Destroy the Common Barberry. By E. C. Stakman, Pathologist, Office of Cercal Investigations. Pp. 12, figs. 6. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1658.)

A plea for the eradication of this pest, which is an aid to the spread of black stem rust of cereal and forage crops.

DEPARTMENTAL BULLETINS-TECHNICAL.

The publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

Chemical Analyses of Logan Blackberry (Loganberry) Juices. By R. S. Hollingshead, Assistant Chemist, San Francisco Food and Drug Inspection Station. Pp. 12. Contribution from the Bureau of Chemistry. (Professional Paper.) May 29, 1919. (Department Bulletin 773.) Price, 5 cents.

A table of analyses that will aid in detecting dilutions common in commercial products made from the Logan blackberry.

The Rose Midge. By E. R. Sasseer, Collaborator, and A. D. Borden, Scientific Assistant, Tropical and Subtropical Fruit Insect Investigations. Pp. 8, figs. 2. Contribution from the Bureau of Entomology. (Professional Paper.) May 3, 1919. (Department Bulletin 778.) Price, 5 cents.

Of interest to florists.

Digestibility of Some By-Products Oils. By Arthur D. Holmes, Specialist in Charge of Digestion Experiments, Office of Home Economics. Pp. 16. Contribution from the States Relations Service. (Professional Paper.) May 31, 1919. (Department Bulletin 781.) Price, 5 cents.

This bulletin records studies of the digestibility of apricot-kernel oil, cherry-kernel oil, melon-seed oil, pumpkin-seed oil, and tomato-seed oil. It is primarily of interest to students and investigators of food problems.

Prevailing Plans and Practices among Farmers' Mutual Fire Insurance Companies. By V. N. Valgren, Investigator in Agricultural Insurance. Pp. 16, fig. 1. Contribution from the Bureau of Markets. May 28, 1919. (Department Bulletin 786.) Price, 5 cents. This bulletin should be of special interest to the directors and officers of farmers' mutual insurance companies, and to those who contemplate the organization of such companies.

Moisture in Wheat and Mill Products. By J. H. Shollenberger, Grain Supervisor, in Charge of Milling Investigations. Pp. 12, figs. 2. Contribution from the Bureau of Markets. (Professional Paper.) May 15, 1919. (Department Bulletin 788.) Price. 5

Of special interest to millers and persons in charge of grain elevators.

REPORTS.

Annual Reports of the Department of Agriculture for the year ended June 30, 1918. Re of the Secretary with Reports of the Chiefs of Bureaus and Divisions. Pp. 1919. Price, 55 cents.

Field Operations of the Bureau of Soils. (Sixteenth Report.) 1914. By Milton Whitney, Chief, with accompanying papers by Assistants in Charge of field parties. Pp. 2850, pls. 91, figs. 73, maps, (in case) 65. Price, \$8.25. Cloth.

For distribution also by Senators, Representatives, and Delegates in Congress.

MISCELLANEOUS.

Report of Committee Appointed by the Secretary of Agriculture to Consider the Subject of Farm Organization as one of the Divisions of Research Work of the Proposed Bureau of Farm Management and Farm Economics. Pp. 12. May, 1919. (Circular 135, Office of the Secretary.) Price, 5 cents.

Regulations of the Secretary of Agriculture Under Section 5 of the United States Cotton Futures Act as Amended March 4, 1919. Pp. 26. May 22, 1919. (Circular 137, Office of the Secretary.) Price, 5 cents.

Sewing for Girls' Club Work. By Ola Powell, Assistant in Home Demonstration Work. Contribution from the States Relations Service. May, 1919. Pp. 20, figs. 15. (Department Circular 2.)

Drying Vegetables and Fruits for Home Use. By Frants P. Lund, Extension Specialist in Drying and Canning. Pp. 23, figs. 5. Contribution from the States Relations Service. May, 1919. (Department Circular 3.)

Gardening Instructions for Club Members. Contribution from the States Relations Service.
April, 1919. Pp. 16, figs. 11. (Department Ciscular 27.)

Cotton Gin Fires, Caused by Static Electricity. Pp. 8, figs. 2. Contribution from the Bureau of Chemistry. (Department Circular 28.)

Discusses the causes of cotton gin fires and suggests methods of prevention.

Organization of a County for Extension Work—The Farm-Bureau Plan. By L. R. Simons, Agriculturist, County-Agent Work. Pp. 26, figs. 3. Contribution from the States Relations Service. May, 1919. (Department Circular 30.)

Culling the Poultry Flock—Why, When, and How. Contribution from the Bureau of Animal Industry. May 2, 1919. Pp. 4. (Department Circular 31.)

Potato Wart—A Dangerous New Disease. Contribution from the Bureau of Plant Industry. May 12, 1919. Pp. 4 il. (Department Circular 32.)

Use of Poultry Club Products. Contribution from the States Relations Service. Pp. 14, figs. 6. May 1919. (Department Circular 36.)

figs. 6. May, 1919. (Department Circular 36.)

A Report on the Retail Prices of Nitrate of Soda and Acid Phosphate as of May 1, 1919. Contribution from the Bureau of Soils. May, 1919. Pp. 15. (Department Circular 39.)

SERIALS.

Experiment Station Record. Vol. 40, No. 3, Abstract Number. May 15, 1919. E. W. Allen, Ph. D., Editor. Pp. 201-300. Price, 15 cents.

Same, Vol. 40, No. 4. March, 1919. Pp. 301-400. Price, 15 cents.

ENOTE.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

Marthly Crop Reperter. Vol. 5, No. 5, May, 1919. Pp. 45-52. (Bureau of Crop Esti-

Monthly Crop Reporter. Vol. 5, No. 5. May, 1919. Pp. 45-52. (Bureau of Crop Esti-

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

SERVICE AND REGULATORY ANNOUNCEMENTS-FOR SALE ONLY.

These contain only information, instructions, and notices governing the enforcement of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.

Bureau of Animal Industry. No. 144. April, 1919. Pp. 31-44. May 31, 1919. Price, 5 cents.

Bureau of Chemistry. Price, 10 cents. Supplement 57. (N. J. 6301-6350.) Pp. 345-403. May 10, 1919.

Federal Horticultural Board. No. 61. March, 1919. Pp. 29-47. May 5, 1919. Price, 5 cents.

Bureau of Markets. No. 47. Pp. 21, figs. 10. May 29, 1919. Price, 5 cents. Bureau of Markets. No. 48. Pp. 7, fig. 1. May 8, 1919. Price, 5 cents.

Bureau of Markets. No. 50. Pp. 13. May 20, 1910. Price, 5 cents.

Bureau of Markets No. 51. The Inspection of Butter under the Food Products Inspection Law. Pp. 23. May 28, 1919. Price, 5 cents.

Bureau of Markets. No. 52. How to Take an Appeal to the Secretary of Agriculture from a Licensed Inspector's Grading to Determine the True Grade of Grain Under the United States Grain Standards Act. Pp. 20, figs. 9. May 23, 1919. Price, 5 cents.

SOIL SURVEYS.

All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

Soil Survey of Faulkner County, Arkansas. By E. B. Deeter, In Charge, and Henry I. Cohn. Pp. 35, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

Soil Survey of the Angheim Area, California. By E. C. Eckmann, In Charge, A. T. Strahorn, and L. C. Holmes, of the U. S. Department of Agriculture, and J. E. Guernsey, of the University of California. Pp. 79, pls. 3, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.

Reconneissance Soil Survey of the Middle San Joaquin Valley, California. By L. C. Holmes, In Charge, and E. C. Eckmann, of the U. S. Department of Agriculture, and J. W. Nelson and J. E. Guernsey, of the University of California. Pp. 115, pls. 3, fig. 1, map. (From F. O. Soils, 1916.) Price, 25 cents.

Soil Survey of the Santa Maria Area, California. By E. B. Watson, of the U. S. Department of Agriculture, In Charge, and Alfred Smith, of the University of California. Pp. 48, pls. 4, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.

Soil Survey of Shelby County, Kentucky. By Cornelius Van Duyne. In Charge, and L. R. Schoenmann, of the U. S. Department of Agriculture, and S. D. Averitt, of the Kentucky Agricultural Experiment Station. Pp. 67, pl. 1, fig. 1, map. (From F. O. Soils, 1916.) Price, 15 cents.

Soil Survey of Amite County, Mississippi. By A. L. Goodman, A. H. Meyer, R. W. McClure, and B. H. Hendrickson. Pp. 38, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

Soil Survey of Oswego County, New York. By Charles N. Mooney, In Charge, and E. T. Maxon, of the U. S. Department of Agriculture, and R. J. Morgan and J. H. Bromley, of the New York State College of Agriculture. Pp. 43, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

Soil Survey of Saratega County, New York. By E. T. Maxon, of the U. S. Department of Agriculture, and J. H. Bromley, of the New York State College of Agriculture. Pp. 42, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

Soil Survey of Benton County, Washington. By A. E. Kocher, In Charge, and A. T. Strahorn. Pp. 72, pls. 3, figs. 2, map. (From F. O. Soils, 1916.) Price, 15 cents.

SEPARATES.

Cotton Warchousing—Benefits of an Adequate System. With a discussion of the Receipt under the United States Warehouse Act. By Roy L. Newton and James M. Workman, Bureau of Markets. Pp. 36, figs. 8. (Separate 763, Yearbeek, 1918.) Price, 5

The Commercial Apple Industry in the United States. By J. C. Folger, Fruit Crop Specialist, Bureau of Crop Estimates. Pp. 14, pl. 1, fig. 1. (Separate 757, Yearbook, 1918.) Price, 5 cents.

Arable Lands in the United States. By O. E. Baker and H. M. Strong, Office of Farm Management. Pp. 11, pls. 10. (Separate 771, Yearbook, 1918.) Price, — cents.

Government Market Reports on Live Stock and Meats. By James Atkinson, Bureau of Markets. Pp. 22. (Separate 788, Yearbook, 1918.) Price, 5 cents.

Live Stock, 1918. Pp. 42. (Separate 793, Yearbook, 1918.) Price, 5 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 47, No. 2. February, 1919. [May 5, 1919.] Pp. xi, 65-142, figs. 30, charts 9. Price, 25 cents per copy, \$2.50 per year, payable to the Superintendent of Documents.

Special Articles: Trans-Atlantic flight from the meteorologist's point of view. By W. R. Gregg.—The flight of aircraft and the deflective influence of the earth's rotation. By C. F. Marvin.—United States still holds airplane altitude record.—Air routes to Australia. By Griffith Taylor.—Report of the British Civil Acrial Transport Committee,—Meteorology during and after the war. By H. G. Lyons.—Influence of weather on military operations. By R. De C. Ward.—Measurements of the solar constant of radiation. By C. G. Abbot.—The direction of rotation of cyclonic depressions. By J. S. Dines.—Congress of Scandinavian geophysicists.—On the structure of moving cyclones. By J. Bjerknes.—Synoptic investigation of hydrographical phenomena. By H. Pettersson.—An electrical instrument for recording seawater salinity. By E. E. Weibel and A. L. Thuras.—Relation between vegetative and frostless periods. By J. B. Kincer.—Weather control of the periodical cicada. By W. E. Hurd. Hurd

National Weather and Crop Bulletin. Nos. 7, 8, 9, 10, May, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly, on Wednesdays, April to October; monthly remainder of year. Price, 25 cents a year.

EDWY B. REID, Chief, Division of Publications.

ume	
Rural Route or Street No	
City or Town	
State	

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

WASHINGTON, D. C., June 30, 1919.

MONTHLY LIST OF PUBLICATIONS.

[June, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His cffice is not a part of the Department of Agriculture.

FARMERS' BULLETINS—FOR FREE DISTRIBUTION.

CFNOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy.

"White Ants" as Pests in the United States and Methods of Preventing Their Damage. By T. E. Snyder, Specialist in Forest Entomology, Forest Insect Investigations. Pp. 16, figs. 11. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1037.)

A revision of Farmers' Bulletin 759, and suitable for general distribution.

- The Striped Cucumber Beetle and Its Control. By F. H. Chittenden, Entomologist in Charge, Truck-Crop Insect Investigations. Pp. 19, figs. 15. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1038.)

 Suitable for general distribution.
- Saving Man Labor in Sugar Beet Fields. By L. A. Moorhouse, Agriculturist, and T. H. Summers, Scientific Assistant. Pp. 18, figs. 26. Contribution from the Office of Farm Management. (Farmers' Bulletin 1042.)

 Of interest to sugar-beet growers generally.
- Laying Out Fields for Tractor Plowing. By H. R. Tolley, Scientific Assistant. Pp. 40, figs. 33. Contribution from the Office of Farm Management. (Farmers' Bulletin 1045.)

Of interest to all farmers using tractors.

Rhodes Grass. By S. M. Tracy, Agronomist, Office of Forage-Crop Investigations. Pp. 16, figs. 3. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1048.)

Suitable for distribution in Florida, along the Gulf coast westward, and in southern Texas; also in southern California and Arizona.

Handling and Loading Southern New Potatoes. By A. M. Grimes, Scientific Assistant. Pp. 18, figs. 17. Contribution from the Bureau of Markets. (Farmers' Bulletin 1050.)

Suggests methods of handling potatoes to avoid loss in transit, and is of interest to commercial growers and shippers of potatoes.

125247°-19

Control of Cherry Leaf-Spot. By John W. Roberts, Pathologist, and Leslie Pierce, Assistant, Office of Fruit-Disease Investigations. Pp. 8, figs. 6. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1053.)

Suitable for general distribution.

DEPARTMENTAL BULLETINS-TECHNICAL.

AFThe publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

- The Leaf-Spot Diseases of Alfalfa and Red Clover Caused by the Fungi Pseudopeziza Medicaginis and Pseudopeziza Trifolii, Respectively. By Fred Reuel Jones, Pathologist, Cotton, Truck, and Forage Crop Disease Investigations. Pp. 38, pls. 3, figs. 5. Contribution from the Bureau of Plant Industry. (Professional Paper.) June 19, 1919. (Department Bulletin 759.) Price, 10 cents.
- Lessons on Dairying for Rural Schools. By Alvin Dille, Assistant in Agricultural Education. Pp. 31, figs. 14. Contribution from the States Relations Service. (Professional Paper.) June 6, 1919. (Department Bulletin 763.) Price, 10 cents.

For use of teachers.

- Commercial Preservation of Eggs by Cold Storage. By M. K. Jenkins, Assistant Bacteriologist. Pp. 66, pls. 6, figs. 8. Contribution from the Bureau of Chemistry. June 3, 1919. (Department Bulletin 775.) Price, 10 cents.

 Of especial interest to wholesale dealers in eggs and managers of cold-storage plants.
- The Grain Bug. By D. J. Caffrey and George W. Barber, Scientific Assistants, Cereal and Forage Insect Investigations. Pp. 35, figs. 13. Contribution from the Bureau of Entomology. (Professional Paper.) June 24, 1919. (Department Bulletin 779.) Price, 5 cents.

Describes a serious enemy to wheat and other small grains in the intermountain and southwestern States and suggests methods of control.

- Nosema-Disease. By G. F. White, Specialist in Insect Diseases. Pp. 59, pls. 4, figs. 7. Contribution from the Bureau of Entomology. (Professional Paper.) June 12, 1919. (Department Bulletin 780.) Price, 10 cents.

 A description of an infectious disease of adult honeybees. Of interest to all bee keepers.
- A Study of the Alkali-Forming Bacteria Found in Milk. By S. Henry Ayers, Philip Rupp, and Wm. T. Johnson, jr., of the Dairy Division. Pp. 39, figs 2. Contribution from the Bureau of Animal Industry. (Professional Paper.) June 17, 1919. (Department Bulletin 782.) Price, 5 cents. Of interest to chemists generally.
- Lessons on Potatoes for Elementary Rural Schools. By Alvin Dille, Assistant in Agricultural Education. Pp. 24. Contribution from the States Relations Service. (Professional Paper.) June 10, 1919. (Department Bulletin 784.) Price, 5 cents.

For use of teachers and rural schools.

Protection from the Locust Borer. By F. C. Craighead, Specialist in Forest Entomology, Forest Insect Investigations. Pp. 12, pls. 3. Contribution from the Bureau of Entomology. June 9, 1919. (Department Bulletin 787.) Price, 5 cents.

Suggests methods of control of this insect and is of especial interest to those engaged in growing locust trees on a commercial scale.

MISCELLANEOUS.

Standards of Purity for Food Products. Pp. 22. June, 1919. (Circular 136, Office of the Secretary.) Price, 5 cents.

Supersedes Office of the Secretary Circulars 13, 17, and 19.

Report of the Committee Appointed by the Secretary of Agriculture to Consider the Subject of Land Economics as one of the Divisions of Research Work of the Proposed Bureau of Farm Management and Farm Economics. Pp. 8. June, 1919. (Circular 138, Office of the Secretary.) Price, 5 cents.

- Report of Committee Appointed by the Secretary of Agriculture to Consider the Subject of Farm Life Studies as One of the Divisions of Research Work of the Proposed Bureau of Farm Management and Farm Economics. Pp. 8. June, 1919. (Circular 139, Office of the Secretary.) Price, 5 cents.
- Lumber Export and Our Forests. By Henry S. Graves, Forester, Forest Service. Pp. 15. June, 1919. (Circular 140, Office of the Secretary.) Price, 5 cents.
- Trend of the Dairy-Cattle Industry in the United States and Other Countries. By T. R. Pirtle, Dairy Division. Pp. 19, figs. 21. Contribution from the Bureau of Animal Industry. June, 1919. (Department Circular 7.)
- Meadow Fescue. By H. N. Vinall, Agronomist, Forage-Crop Investigations. Pp. 4, fig. 1. Contribution from the Bureau of Plant Industry. 1919. (Department Circular 9.)
- Points for Egg Buyers. What to Sell: What to Buy: How to Candle: Egg-Candling Devices. Pp. 11, il. Contribution from the Bureau of Chemistry. 1919. (Department Circular 25.)
- How Teachers May Use Farmers' Bulletin 1044, The City Home Garden. By Alvin Dille, Assistant in Agricultural Education: Pp. 8. Contribution from the States Relations Service. June, 1919. (Department Circular 33.)
- Status and Results of County-Agent Work in Northern and Western States, 1918, Showing War Service of the County Agent. By W. A. Lloyd, In Charge of County-Agent Work. Pp. 16, figs. 6. Contribution from the States Relations Service. May 15, 1919. (Department Circular 37.)
- Boys' Agricultural Club Work in the Southern States. By I. W. Hill and C. L. Chambers, Boys' Club Work. Pp. 22, figs. 10. Contribution from the States Relations Service. June, 1919. (Department Circular 38.)
- Insect Enemies and Diseases of the Tomato. Pp. 18, figs. 33. Contribution from Office of Extension Work South, States Relations Service. June, 1919. (Department Circular 40.)
- Mountain Playgrounds of the Pike National Forests. Pp. 17, figs. 5, map. Contribution from the Forest Service, 1919. (Department Circular 41.)
- Perennial Rye-Grass. By Lyman Carrier, Agronomist. Pp. 2. Contribution from the Bureau of Plant Industry. May 31, 1919. (Department Circular 42.)
- How to Make a Hog Crate. Pp. 2, fig. 1. Contribution from the Bureau of Animal Industry. 1919. (Department Circular 46.)
- Making and Maintaining a Lawn. Pp. 6. Contribution from the Bureau of Plant Industry. June 16, 1919. (Department Circular 49.)
- Sudan Grass. (Andropogon sorghum var.). Pp. 4. Contribution from the Bureau of Plant Industry. June 16, 1919. (Department Circular 50.)
- Our National Elk Herds. A Program for Conserving the Elk on National Forests about the Yellowstone National Park. By Henry S. Graves, Forester, and E. W. Nelson, Biologist. Pp. 34, figs. 19. Contribution from the Forest Service and the Bureau of Biological Survey. June, 1919. (Department Circular 51.)

SERIALS.

Journal of Agricultural Research. (For sale only.) Vol. 17, No. 2. May 15, 1919. Contents: Influence of Soil Environment on the Root-rot of Tobacco. (rs Wis-15.) By James Johnson and R. E. Hartman. Pp. 41-86, pls. 8. Price, 15 cents.

MOTE.—Volumes 1 to 4 of the Journal of Agricultural Research were published monthly, volumes 5 to 16 weekly, and volume 17 is being issued monthly. The Journal is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$1.50 per year for domestic circulation and \$2 for foreign circulation.

Experiment Station Record. Vol. 40, No. 5. April, 1919. E. W. Allen, Ph. D., Editor. Pp. 401-500. Price, 15 cents.

Same, Vol. 40, No. 6. Abstract Number. June 23, 1919. Pp. 501-600. Price, 15 cents.

PROTE.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

The Monthly Crop Report. Vol. 5, No. 6. June, 1919. Pp. 53-60. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

SOIL SURVEYS.

All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

Soil Survey of Howard County, Arkansas. By M. W. Beck, M. Y. Longacre, F. A. Hayes, and W. T. Carter, jr. Pp. 48, pls. 3, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

Soil Survey of Barbour and Upshur Counties, West Virginia. By W. J. Latimer. Pp. 51, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

SEPARATES.

Miscellaneous Agricultural Statistics, 1918. Pp. 64. (Yearbook Separate 795.) Price, — cents.

The Black Stem Rust and the Barberry. By E. C. Stakman, Bureau of Plant Industry. Pp. 28, pls. 10. (Yearbook Separate 796.) Price, — cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Bureau. Vol. 47, No. 3. March, 1919. [June 10, 1919.] Pp. 143-204, figs. 29, charts 9. Price, 25 cents per copy, \$2.50 per year, payable to the Superintendent of Documents.

to the Superintendent of Documents.

Special Articles: Conventional clouds induced by forest fires. By F. A. Carpenter.—Notes on a cumulus cloud formed over a fire. By C. A. Reichelt.—Rain from cumulus clouds over fires. By J. P. Espy.—Heights of cumulus clouds forming over fires. By S. P. Fergusson and C. F. Brooks.—Results of observations of clouds during the solar eclipse June 8, 1918. By S. P. Fergusson.—Clouds in east Texas on June 8, 1918. By C. F. Brooks.—Reflecting power of clouds. By L. B. Aldrich.—An improvement in the pole star recorder. By B. C. Kadel.—The duration of moonlight. By A. McAdie.—On the relations of atmospheric pressure, temperature, and density to altitude. By H. H Kimball.—The temperature, pressure, and density of the atmosphere in the region of northern France. By W. J. Humphreys.—The minimum temperature at the base of the stratosphere. By W. J. Humphreys.—Why clouds never form in the stratosphere. By W. J. Humphreys.—The daily variation of temperature in the lower strata of the atmosphere. By W. H. Dines.—On the diurnal incidence of maximum and minimum temperatures at Eskdalemuir. By A. C. Mitchell.—Influence of snow-cover on the temperature distribution in Utah, January, 1919. By T. A. Blair.—Effect of gunfire on the rainfall of the British Isles. By H. R. Mill.—Tornado at Porter, Okla., March 15, 1919. By J. A. Reihle.—The storm of March 16, 1919, at Fort Smith, Ark. By L. J. Guthrie.—General extent of collegiate instruction in meteorology and climatology in the United States. By C. F. Brooks.

National Weather and Crop Bulletin. Nos. 11, 12, 13, 14, June, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly, on Wednesdays, April to October; monthly remainder of year. Price, 25 cents a year.

EDWY B. REID, Chief, Division of Publications.

Name		
	•	
Ru	ral Route or Street No	
•	City or Town	
	State	

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

WASHINGTON, D. C., July 31, 1919.

MONTHLY LIST OF PUBLICATIONS.

[JULY, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His

office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

CFNOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy.

Alfalfa on Corn-Belt Farms. By J. A. Drake, Agriculturist, J. C. Rundles, Scientific Assistant, and Ralph D. Jennings, Scientific Assistant. Pp. 32, figs. 16. Contribution from the Office of Farm Management. (Farmers' Bulletin 1021.)

This bulletin tells how the more successful Corn-Belt growers fit alfalfa into their cropping systems without interfering seriously with labor schedules.

Commercial Comb-Honey Production. By Geo. S. Demuth, Apicultural Assistant, Bee-culture Investigations. Pp. 40, figs. 14. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1039.)

A revision of Farmers' Bulletin 503, and of interest to all commercial beckeepers.

Dry Farming for Better Wheat Yields. The Columbia and Snake River Basins. By Byron Hunter, Agriculturist. Pp. 24, figs. 18. Contribution from the Office of Farm Management and the Bureau of Plant Industry. (Farmers' Bulletin 1047.)

This bulletin deals in particular with the dry-farming methods practiced on grain farms in the Pacific Northwest where the rainfall is less than 18 to 20 inches annually, but it also contains advice helpful to all farmers of that region who practice summer fallowing.

Baling Hay. By H. B. McClure, Agronomist. Pp. 35, figs. 8. Contribution from the Office of Farm Management. (Farmers' Bulletin 1049.)

This bulletin aims to help the hay grower solve some of the problems that arise in connection with baling hay; to decide whether to buy a press or depend on custom balers, to select the type of press best suited to his needs if he buys, and to settle to best advantage questions in farm practice that determine efficiency in the setting and operation of a hay press.

DEPARTMENTAL BULLETINS-TECHNICAL.

AFThe publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

The Relation of the Shrinkage and Strength Properties of Wood to Its Specific Gravity. By J. A. Newlin, in Charge, Section of Timber Mechanics, and T. R. C. Wilson, Engineer in Forest Products. Pp. 35, figs. 7. Contribution from the Forest Service. (Professional Paper.) July 16, 1919. (Department Bulletin 676.) Price, 10 cents.

Of interest to mechanical engineers generally.

Inheritance of the Waxy Endosperm in Maize. By J. H. Kempton, Assistant in Crop Acclimatization. Pp. 99, figs. 14. Contribution from the Bureau of Plant Industry. (Professional Paper.) June 26, 1919. (Department Bulletin 754.) Price, 15 cents.

Of interest to breeders of crop plants.

Factors Influencing the Carrying Qualities of American Export Corn. By E. G. Boerner, Grain Supervisor. Pp. 99, figs. 72. Contribution from the Bureau of Markets. (Professional Paper.) July 5, 1919. (Department Bulletin 764.) Price, 20 cents.

Results of experiments carried on to determine the reasons for the spoiling of corn during shipment to Europe.

A Study of Compsilura Concinnata, an Imported Tachinid Parasite of the Gipsy Moth and the Brown-Tail Moth. By Julian J. Culver, Entomological Assistant, Gipsy Moth and Brown-Tail Moth Investigations. Pp. 27, pl. 1, figs. 10, map. Contribution from the Bureau of Entomology. (Professional Paper.) July 10, 1919. (Department Bulletin 766.) Price, 10 cents.

Describes results obtained by the introduction of this parasite, and its value as a preventative of the spread of the gipsy and brown-tail moth.

Fattening Steers on Summer Pasture in the South. By W. F. Ward, Dan. T. Gray, and E. R. Lloyd. Pp. 24, fig. 1 Contribution from the Bureau of Animal Industry. July 10, 1919. (Department Bulletin 777.) Price, 5 cents.

Of interest to producers of beef in the South where pasture is largely depended upon for feed.

The Rice Moth. By F. W. Chittenden, Entomologist in Charge of Truck-Crop Insect Investigations. Pp. 15, pls. 5, figs. 2. Contribution from the Bureau of Entomology. (Professional Paper.) July 14, 1919. (Department Bulletin 783.) Price, 10 cents.

Describes this insect enemy of stored rice and suggests methods for its control.

Report of Storage Holdings of Certain Food Products During 1918. By John O. Bell, Assistant in Market Surveys. Pp. 80, figs. 40. Contribution from the Bureau of Markets. July 25, 1919. (Department Bulletin 792.)

Covers frozen meats, cured meats and lard, frozen fish, cured herring, and mild cured salmon.

Lead Poisoning in Waterfowl. By Alexander Wetmore, Assistant Biologist. Pp. 12, pls. 2. Contribution from the Bureau of Biological Survey. (Professional Paper.) July 31, 1919. (Department Bulletin 793.) Price, 5 cents.

This bulletin is a report of studies made of a serious malady among ducks and other water fowl in the United States. It is for the information of sportsmen, naturalists, and others interested in game birds.

The Adulteration of Insect Powder with Powdered Daisy Flowers (Chrysanthemum Leucanthemum L.). By R. C. Roark and G. L. Keenan. Pp. 12, pls. 2, fig. 1. Contribution from the Bureau of Chemistry. (Professional Paper.) July 28, 1919. (Department Bulletin 795.)

Of interest to chemists generally.

MISCELLANEOUS.

Yearbook of the U. S. Department of Agriculture for 1918. Pp. 760, pls. 62, figs. 34. Price, 85 cents.

This Yearbook contains the annual report of the Secretary, 73 pages; 28 miscellaneous articles, 441 pages; an appendix, 218 pages; an index, 34 pages. Only 30,000 out of the 500,000 edition are allotted to the Department, and this amount is insuffi-

- cient to supply its agents, correspondents, and employees. The remainder of the edition is allotted to Senators, Representatives, and Delegates in Congress, and applicants, other than persons connected with the Department, are therefore advised that the publication can not be furnished to them by the Department. The Superintendent of Documents, Government Printing Office, Washington, D. C., has it for sale at 85 cents per copy.
- Suggestions for the Marketing of Cottage Cheese. By Delos L. James. Pp. 14, figs. 12. Contribution from the Bureau of Animal Industry. June, 1919. (Department Circular 1.)
- Out-of-Door Playgrounds of the San Isabel National Forest. Pp. 19, il. Contribution from the Forest Service. (Department Circular 5.)
- A Summer Vacation in the Sopris National Forest. Pp. 15, il. Contribution from the Forest Service. (Department Circular 6.)
- Arbor Day. Pp. 23, il. Contribution from the Forest Service. June, 1919. (Department Circular 8.)
- Vacation Trips in the Holy Cross National Forest. Pp. 15, il. Contribution from the Forest Service. (Department Circular 29.)
- Outdoor Life in the Colorado National Forest. Pp. 19, il. Contribution from the Forest Service. (Department Circular 34.)
- Red Top. By Lyman Carrier, Agronomist. Pp. 2. Contribution from the Bureau of Plant Industry. 1919. (Department Circular 43.)
- Italian Rye-Grass. By Lyman Carrier, Agronomist. Pp. 2. Contribution from the Bureau of Plant Industry. 1919. (Department Circular 44.)
- Para Grass. By S. M. Tracy, Agronomist. Pp. 2. Contribution from the Bureau of Plant Industry. 1919. (Department Circular 45.)
- Points for Poultry Packers. No 4. How to Wrap Heads. Contribution from the Bureau of Chemistry. 1919. (Department Circular 52.)

SERIALS.

- Journal of Agricultural Research. (For sale only.) Vol. 17, No. 3. June 16, 1919. Contents: Relation of Sulphates to Plant Growth and Composition. (rw Oreg-4) By H. G. Miller.—Relation of Weather to Fruitfulness in the Plum. (ru Minn-38) By M. J. Dorsey.—Structure of the Maize Ear as Indicated in Zea-Euchlaena Hybrids. (rx G-175) By G. N. Collins. Pp. 87-135, pls. 10. Price, 25 cents.
- Same, Vol. 13, No. 13. June 24, 1918. 1919. Contents and Index of Volume 13. Price, 5 cents.
 - MNOTE.—Volumes 1 to 4 of the Journal of Agricultural Research were published monthly, volumes 5 to 16 weekly, and volume 17 is being issued monthly. The Journal is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$1.50 per year for domestic circulation and \$2 for foreign circulation.
- The Monthly Crop Report. Vol. 5, No. 7. July, 1919. Pp. 61-72. (Bureau of Crop Estimates.)
 - Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

SERVICE AND REGULATORY ANNOUNCEMENTS—FOR SALE ONLY.

- of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.
- Bureau of Animal Industry. No. 145. May, 1919. Pp. 47–57. July 3, 1919. Price, 5 cents.
- Bureau of Animal Industry. No. 146. June, 1919. Pp. 59-67. July 21, 1919. Price, 5 cents.
- Biological Survey. No. 28. Regulations for the protection of game in certain localities in Alaska. Pp 3. July 12, 1919. Price, 5 cents.

Federal Horticultural Board. No. 63. May, 1919. Pp. 65-75. July 25, 1919. Price, 5 cents.

Bureau of Markets. No. 56. Pp. 6. July 7, 1919. Price, 5 cents.

SOIL SURVEYS.

All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

Soil Survey of Caldwell County, North Carolina. By W. B. Cobb, of the U. S. Department of Agriculture, and S. F. Davidson, of the North Carolina Department of Agriculture. Pp. 29, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Report of the Chief of the Weather Bureau, 1917–1918. [1919.] Pp. 292. Price, 65 cents. Cloth binding.

Monthly Weather Review. Vol. 47, No. 4. April, 1919. Pp. 205-278, figs. 37, Charts 9. Price, 25 cents per copy, \$2.50 per year, payable to the Superintendent of Documents.

Special Articles: Aerological work of the Weather Bureau during the war. By W. R. Gregg.—Some scientific aspects of the meteorological work of the Signal Corps. By R. A. Millikan.—The Military meteorological service in the United States during the war. By B. J. Sherry and A. T. Waterman.—A two-theodolite plotting board. By W. C. Haines and R. A. Wells.—Some observed irregular vertical movements of pilot balloons. By I. R. Tannehill.—The work of the Aerographic Section of the Navy. By A. McAdic.—Blue Hill methods of pilot ballooning. By I. Mall.—British pilot-balloon methods: The Shoeburyness system.—A free-balloon flight in the north-cast quadrant of an intense cyclone. By C. LeR. Meisinger.—Weather conditions during some notable airship voyages.—Hot Winds at Tampico, Mexico, April 6 and 7, 1919. By S. A. Grogan.—Tornadoes in eastern Nebraska, April 6, 1919. By G. A. Loveland.—Tornado in southern Alabama, March 5, 1919. By P. H. Smyth.—The larger relations of climate and crops in the United States. By R. DeC. Ward.—The meteorological activities of the late Prof. Edward C. Pickering. By R. DeC. Ward.

National Weather and Crop Bulletin. Nos. 15, 16, 17, 18, 19, July, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly on Wednesdays, April to October; monthly remainder of year. Price, 25 cents a year.

Edwy B. Reid, Chief, Division of Publications.

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

Washington, D. C., August 30, 1919,

MONTHLY LIST OF PUBLICATIONS.

[AUGUST, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His

office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

NOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy unless otherwise noted.

Sheep on Irrigated Farms in the Northwest. By Stephen O. Jayne, Agriculturist. Pp. 32, figs. 4. Contribution from the Office of Farm Management. (Farmers' Bulletin 1051.)

Of interest to western farmers.

Standard Varieties of Chickens, III. The Asiatic, English, and French Classes. By Rob. R. Slocum, Animal Husbandry Division. Pp. 32, figs. 31. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1052.) For general distribution.

The Loco-Weed Disease. By C. Dwight Marsh, Physiologist, Pathological Division, Bureau of Animal Industry. Pp. 19, fig. 11. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1054.) Of interest to stock raisers.

Country Hides and Skins, Skinning, Curing, and Marketing. By C. V. Whalin, Assistant in Marketing Live Stock and Meats, Bureau of Markets; R. W. Frey, Assistant Chemist, Leather and Paper Laboratory, Bureau of Chemistry; F. P. Veitch, Chemist in Charge Leather and Paper Laboratory, Bureau of Chemistry; R. W. Hickman, Chief, Quarantine Division, Bureau of Animal Industry. Pp. 64. figs. 44. Joint Contribution from the Bureau of Markets, Chemistry, and Animal Industry. (Farmers' Bulletin 1055.) Price, 10 cents.

Of interest to stock raisers.

Game Laws for 1919. A Summary of the Provisions of Federal, State, and Provincial Statutes. By George A. Lawyer, Chief, U. S. Game Warden, and Frank L. Earnshaw, Assistant, Interstate Commerce in Game. Pp. 80. Contribution from the Bureau of Biological Survey. (Farmers' Bulletin 1077.) For general distribution.

DEPARTMENTAL BULLETINS-TECHNICAL.

ing to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

- Range Management on the National Forests. By James T. Jardine, Inspector of Grazing, and Mark Anderson, Grazing Examiner. Pp. 98, pls. 32, fig. 4. Contribution from the Forest Service. August 6, 1919. (Department Bulletin 790.) Price, 35 cents.
- Plant Succession in Relation to Range Management. By Arthur W. Sampson, Plant Ecologist. Pp. 76, pls. 2, figs. 24. Contribution from the Forest Service. (Professional Paper.) August 27, 1919. (Department Bulletin 791.) Price, 15 cents.

MISCELLANEOUS.

- Vacation Land. The National Forests in Oregon. Pp. 72, il. Contribution from the Forest Service 1919. (Department Circular 4.)
- Brood Coops and Appliances, Boys and Girls Poultry Club Work. Pp. 8, il. Contribution from the Bureau of Animal Industry, 1919. (Department Circular 13.)
- Preserving Eggs. Boys and Girls Poultry Club Work. Pp. 8, il. Contribution from the Animal Husbandry Division, Bureau of Animal Industry. (Department Circular 15.)
- Lice, Mites, and Cleanliness. Boys and Girls Poultry Club Work. Pp. 8, il. Contribution from the Animal Husbandry Division, Bureau of Animal Industry. (Department Circular 16.)
- Management of Growing Chicks, Boys and Girls Poultry Club Work. Pp. 5, figs. 2. Contribution from the Bureau of Animal Industry, 1919. (Department Circular 17.)
- Culling for Eggs and Market. Boys and Girls Poultry Club Work. Pp. 8, il. Contribution from the Animal Husbandry Division, Bureau of Animal Industry. (Department Circular 18.)
- Common Poultry Diseases. Boys and Girls Poultry Club Work. Pp. 7, il. Contribution from the Animal Husbandry Division, Bureau of Animal Industry. (Department Circular 20.)
- Stomach Worms in Sheep. Prevention and Treatment. Prepared jointly by the Animal Husbandry and Zoological Divisions. Pp. 12. Contribution from the Bureau of Animal Industry. August, 1919. (Department Circular 47.)
- Boys' and Girls' Club Work. The Club Members' Home Vegetable Garden. Pp. 11, fig. 1. Contribution from the States Relations Service. (Department Circular 48.)
- Suggested Improvements in Methods of Selling Cotton by Farmers. Based on A Comparison of Cotton Producers' and Consumers' Prices. By O. J. Mc-Connell, Specialist in Cotton Marketing. Pp. 8. Contribution from the Bureau of Markets. August, 1919. (Department Circular 56.)
- A Report on the Retail Prices of Unmixed Fertilizer Material as of June 1, 1919. With Comparative Prices for May 1. Pp. 11. Contribution from the Bureau of Soils. July, 1919. (Department Circular 57.)
- Directory of Officials and Organizations Concerned with the Protection of Birds and Game, 1919. Pp. 18. Contribution from the Biological Survey, August 20, 1919. (Department Circular 63.)

SERIALS.

Journal of Agricultural Research. (For sale only.) Vol. 17, No. 4. July 15, 1919. Contents: Carbohydrate Metabolism in Green Sweet Corn during Storage at Different Temperatures. By Charles O. Appleman and John M. Arthur. (ry Md.-1.)—Certain Relationships Between the Flowers and Fruits of the Lemon. By Howard S. Reed. (iz Calif.-20.)—Ultra-Microscopic Examination of Disperse Colloids in Bituminous Road Materials. By E. C. E. Lord. (sa D-16.) Pp. 137-176, pl. 1, figs. 4. Price, 10 cents.

Same. Vol. 17, No. 5. August 15, 1919. Contents: Derris as an Insecticide. (sb K-76.) By N. E. McIndoo, A. F. Sievers, and W. S. Abbott.—Effects of Heat on Trichinae. (sc A-48.) By B. H. Ransom and Benjamin Schwartz.—Effect of Removing the Pulp from Camphor Seed on Germination and the Subsequent Growth of the Seedlings. (sd G-176.) By G. A. Russell.—Bacterium abortus Infection of Bulls. (sf A-49.) By J. M. Buck, G. T. Creech, and H. H. Ladson. Pp. 177-246, pls. 24, figs. 5. Price, 25 cents.

MOTE.—Volumes 1 to 4 of the Journal of Agricultural Research were published monthly, volumes 5 to 16 weekly, and volume 17 is being issued monthly. The Journal is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$1.50 per year for domestic circulation and \$2 for foreign circulation.

Experiment Station Record. Vol. 39. Index Number. August 23, 1919. E. W. Allen, Ph. D., Editor. Pp. i-xxx. 901-1002. Price, 15 cents.

Experiment Station Record. Vol. 40, No. 7. May, 1919. E. W. Allen, Ph. D., Editor. Pp. 601–700. Price, 15 cents.

PROTE.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

The Monthly Crop Reporter. Vol. 5, No. 8. August, 1919. Pp. 73-84. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

SERVICE AND REGULATORY ANNOUNCEMENTS-FOR SALE ONLY.

of the food and drugs act, meat inspection, 28-hour, and notices governing the enforcement of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials, whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.

Bureau of Animal Industry. No. 147. July, 1919. Pp. 69-81. August 30, 1919. Price, 5 cents.

Biological Survey. No. 29. Amendments to the Migratory Bird Treaty Act Regulations. Pp. 2. August 14, 1919. Price, 5 cents.

Bureau of Chemistry. Supplement 59. (N. J. 6401-6450.) Pp. 467-526. August 20, 1919. Price, 10 cents.

Insecticide and Fungicide. No. 26. Pp. 573-607. August 25, 1919. Price, 5 cents.

SOIL SURVEYS.

- Soil Survey of the Los Angeles Area, California. By J. W. Nelson and C. J. Zinn, of the University of California, and A. T. Strahorn, E. B. Watson, and J. E. Dunn, of the U. S. Department of Agriculture. Pp. 78, pls. 3, fig. 1, map. (From F. O. Soils 1916.) Price, 15 cents.
- Soil Survey of Henry County, Iowa. By A. H. Meyer, of the United States Department of Agriculture, and T. H. Benton, of the Iowa Agricultural Experiment Station. Pp. 32, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Buena Vista County, Iowa. By L. Vincent Davis, of the U. S. Department of Agriculture, and H. W. Warner, of the Iowa Agricultural Experiment Station. Pp. 37, pls. 4, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review, Vol. 47, No. 5. May, 1919. Pp. 279–365, figs. 52, charts 22. Price, 25 cents per copy, \$2.50 per year, payable to the Superintendent of Documents.

Contents: The first trans-Atlantic flight. By W. R. Gregg.—The flight of Hawker and Grieve. By W. R. Gregg.—A new evaporimeter for use in forest studies. By C. G. Bates.—The measurement of rainfall and snow. By R. E. Horton.—The relation of rainfall to configuration. By C. Salter.—Storm rainfall of the eastern United States.—Panama rainfall. By H. C. Cornthwaite.—Uncle Sam's dampest corner. By G. K. Larrison.—Additional meteorological data needed by engineers. By R. E. Horton.—Elements of hydrology.—The weather and daily flow for hydroelectric plants. By J. C. Alter.—The Colorado River. By F. H. Brandenburg.—Water power in California. By A. H. Palmer. Temperature influence on planting and harvest dates. By J. B. Kincer.—A graphic summary of seasonal work on farm crops. By O. E. Baker, C. F. Brooks, R. G. Hainsworth.—Dufrenoy's observations of the temperature of plants in sunlight and shade.—Note on the heating of plants in sunlight as a factor in growth. By D. A. Seeley.—Measuring the temperature of leaves.—Alfalfa growing in western South Dakota. By H. N. Johnson,—Alfalfa seed growing and the weather in Utah. By J. C. Alter.

National Weather and Crop Bulletin. Nos. 20, 21, 22, 23, August, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly on Wednesdays, April to October, monthly remainder of year. Price, 25 cents a year.

EDWY B. REID, Chief Division of Publications.

$ame____$	60T 30
Rural Route or Street No	11
City or Town	
State	

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

Washington, D.C., September 30, 1919.

MONTHLY LIST OF PUBLICATIONS.

[SEPTEMBER, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

CFNOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy unless otherwise noted.

Controlling Important Fungous and Insect Enemies of the Pear in the Humid Sections of the Pacific Northwest. By D. F. Fisher, Assistant Pathologist, Fruit-Disease Investigations, and E. J. Newcomer, Scientific Assistant, Deciduous-Fruit Insect Investigations. Pp. 34, figs. 18. Joint Contribution from the Bureau of Plant Industry and the Bureau of Entomology. (Farmers' Bulletin 1056.)

For distribution in the coast regions of Oregon and Washington.

Take-All and Flag Smut. Two Wheat Diseases New to the United States. By Harry B. Humphrey, Pathologist in Charge of Cereal Investigations, and Aaron G. Johnson, Pathologist in Cereal-Disease Investigations. Pp. 8, figs. 3. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1063.) For general distribution.

Determining the Age of Cattle by the Teeth. By George W. Pope, Quarantine Division. Pp. 4, figs. 6. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1066.)

Suitable for general distribution.

140657°-19

Laws Relating to Fur-Bearing Animals. A Summary of Laws in the United States, Canada, and Newfoundland Relating to Trapping, Open Seasons, Propagation, and Bounties. By George A. Lawyer, Chief U. S. Game Warden; Frank L. Earnshaw, Assistant, Interstate Commerce in Game; and Ned Dearborn, Assistant Biologist. Pp. 32. Contribution from the Bureau of Biological Survey. (Farmers' Bulletin 1079.)

Suitable for general distribution.

DEPARTMENTAL BULLETINS-TECHNICAL.

The publications listed under this head are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

Australian Saltbush. By Roland McKee, Assistant Agrostologist, Office of Forage Crop Investigations. Pp. 12, figs. 4. Contribution from the Bureau of Plant Industry. (Professional Paper.) September 23, 1919. (Department Bulletin 617.) Price, 5 cents.

Describes the plant and explains that its value as a forage crop has been overestimated.

MISCELLANEOUS.

- Suggestions Regarding Fall-Sown Crops, with Notes on the Live-Stock Situation. September, 1919. Pp. 27. (Circular 142, Office of the Secretary.) Price, 5 cents.
- Inventory of Seeds and Plants Imported by the Office of Foreign Seed and Plant Introduction during the period from Jan. 1 to Mar. 31, 1916. Pp. 97, pls. 6. September 6, 1919. (Inventory No. 46; Nos. 41685 to 42383. Bureau of Plant Industry.) Price, 15 cents.
- Milk and Cream Contests. By Ernest Kelly and George B. Taylor, Dairy Division. Pp. 24, figs. 5. Contribution from the Bureau of Animal Industry. (Department Circular 53.)

A description of the method of conducting milk and cream contests, and is a revision of Department Bulletin 356.

Tuberculosis Eradication Under the Accredited-Herd Plan. Herd List No. 2. (Revised to Apr. 1, 1919.) By J. A. Kiernan, Chief, Tuberculosis Eradication Division. Pp. 96, fig. 1. Contribution from the Bureau of Animal Industry. (Department Circular 54.)

List of herds officially accredited as free from tuberculosis, and of herds that have passed successfully one test with a view to certification.

Points for Egg Shippers. No. 1. (Revised.) How to Load Cars of Eggs. Pp. 16. Contribution from the Bureau of Chemistry. 1919. (Department Circular 55.)

Of interest to dealers who ship in carload lots.

Sources of American Potash. By R. O. E. Davis, Scientist, Soil Laboratory Investigations. Pp. 7. Contribution from the Bureau of Soils. September, 1919. (Department Circular 61.) Price, 5 cents.

Contains statistics of imports and domestic production, 1913 to 1918, inclusive.

Better Sires—Better Stock. Plan of Nation-Wide Crusade to Improve Quality of Live Stock Through Use of Good Pure-Bred Sires. 1919. Pp. 16. (Bureau of Animal Industry.)

SERIALS.

- Experiment Station Record. Vol. 40, No. 8, June, 1919. E. W. Allen, Ph. D., Editor. Pp. 701–800. Price, 15 cents.
- Same, Vol. 40, No. 9, Abstract Number. September 8, 1919. Pp. 801-900. Price, 15 cents.
- Same, Vol. 41, No. 1. July, 1919. Pp. 1-100. Price, 15 cents.

PNOTE.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

The Monthly Crop Reporter. Vol. 5, No. 9, September, 1919. Pp. 85-96. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock.

ANNOUNCEMENT.—Because of the small fund available for printing, it has been found necessary to drop from the mailing list of the Monthly Crop Reporter all names of persons who are not actively cooperating with the United States Department of Agriculture. Persons whose names are dropped may subscribe for this publication through the Superintendent of Documents, Washington, D. C., at the domestic rate of 25 cents per year, and 40 cents per year to foreign addresses, payable only by postal money order or cash. No checks accepted.

Seed Reporter. Vol. 3, No. 3, September 6, 1919. Pp. 8. (Bureau of Markets.) For free distribution.

Contains data relative to stocks, receipts, movement, prices, qualities, outlook, etc., for field and vegetable seeds. Issued monthly.

SERVICE AND REGULATORY ANNOUNCEMENTS-FOR SALE ONLY.

of the food and drugs act, meat inspection, 28-hour, and notices governing the enforcement of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials, whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.

Bureau of Chemistry. Supplement No. 58. [N. J. 6351-6400.] Pp. 405-465. September 8, 1919. Price, 10 cents.

Federal Horticultural Board. No. 64, June-July, 1919. Pp. 77-92. September 13, 1919. Price, 5 cents.

SOIL SURVEYS.

All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

Soil Survey of Mercer County, Pennsylvania. By E. B. Deeter and R. A. Winston, of the U. S. Department of Agriculture, and W. Irvin Galt, of the Pennsylvania State College. Pp. 40, pl. 1, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 47, No. 6. June, 1919. [Sept. 13, 1919.] Pp. 367–446, figs. 39, charts 11. Price, 25 cents per copy, \$2.50 per year, payable to the Superintendent of Documents.

Special articles: Some observations on temperature and winds at moderate elevations above the ground. By V. E. Jakl.—Results of some empiric researches as to the general movements of the atmosphere. By H. H. Hildebrandsson.—General circulation of the atmosphere. By L. Gangoiti.—Thunderstorms at Tulsa, Okla., June 6, 1919. By J. A. Reihle.—Tornado at Fergus Falls, Minn., June 22, 1919.—Measuring visibility. By A. H. Thiessen.—The aurora of March 7–8, 1918. By H. Lyman and C. F. Brooks.—Land and sea breezes in the vicinity of Corpus Christi Bay, Tex. By C. E. Heckathorn.—The first successful nonstop trans-Atlantic flight. By W. R. Gregg.—New World's airplane altitude records.—Further note on the hurricane of August 6, 1918. By R. A. Dyke.

National Weather and Crop Bulletin. Nos. 24, 25, 26, 27, 28, September, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly on Wednesdays, April to October, monthly remainder of year. Price, 25 cents a year.

EDWY B. REID, Chief Division of Publications.



Name	[[] 1910 1910
Rural Route or Street No	MON S PROPERTY
City or Town	0.8.
State	

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

Washington, D. C., October 31, 1919.

MONTHLY LIST OF PUBLICATIONS.

[OCTOBER, 1919.]

READ CAREFULLY BEFORE ORDERING.

ATSend no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

AFNOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy unless otherwise noted.

Cattle Fever Ticks and Methods of Eradication. By W. P. Ellenberger and Robert M. Chapin. Pp. 32. figs. 5. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1057.)

Supersedes Bureau of Animal Industry Circular 207 and Farmers' Bulletins 498 and 603.

Production of Late or Main Crop Potatoes. By William Stuart, Horticulturist, Office of Horticultural and Pomological Investigations. Pp. 39, figs. 21. Contribution from the Eureau of Plant Industry. (Farmers' Bulletin 1064.)

Instructions for the planting, care, and harvesting of the late potato crop. For distribution in northern States.

Feeding Hens for Egg Production. By Harry M. Lamon and Alfred R. Lee, Animal Husbandry Division. Pp. 15, figs. 5. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1067.)
Suitable for general distribution.

Unfermented Grape Juice. How to Make it in the Home. By Charles Dearing, Horticulturist, Office of Horticultural and Pomologial Investigations. Pp. 32. figs. 20. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1075.)

This bulletin is intended solely as a manual for the home preparation of unfermented juice. Supersedes Farmers' Bulletins 175 and 644.

146676-19

Preparation of Barreled Apples for Market. By W. M. Scott, Specialist in Fruit Grading and Standardization, H. C. Hetzel, H. W. Samson, and M. Stockton, Investigators in Marketing Fruits and Vegetables. Pp. 40, figs. 24. Contribution from the Bureau of Markets. (Farmers' Bulletin 1080.)

Of interest to commercial apple growers.

DEPARTMENTAL BULLETINS-TECHNICAL.

The publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

The Production and Conservation of Fats and Oils in the United States. By Herbert S. Bailey and B. E. Reuter. Pp. 7. Contribution from the Bureau of Chemistry. Oct. 29, 1919. (Supplement to Department Bulletin 769.) Price, 5 cents.

This publication completes the report of the fats and oils survey conducted by the Government during 1917 and 1918.

- Notes on Grain Pressures in Storage Bins. By W. J. Larkin, Jr., Consultant in Bulk Grain Handling. Contribution from the Bureau of Markets. (Professional Paper.) Oct. 6, 1919. (Department Bulletin 789.) Price, 5 cents. This bulletin is of interest to engineers, particularly those having occasion to design grain-storage bins.
- Use of Toxic Gases as a Possible Means of Control of the Peach-Tree Borer. By E. E. Blakeslee, Entomological Assistant, Deciduous Fruit Insect Investigations. Pp. 23, pl. 1. Contribution from the Bureau of Entomology. Oct. 21, 1919. (Department Bulletin 796.) Price, 5 cents.

Describes the results of experiments in the use of poisonous gases for the control of this pest.

A Survey of the Fertilizer Industry. By E. A. Goldenweiser, Statistician. Pp. 29. pls. 2, fig. 1. Contribution from the Bureau of Soils. Oct. 20, 1919. (Department Bulletin 798.) Price, 10 cents.

A report upon the production and disposal of fertilizing materials during 1917 and 1918.

The Mosaic Disease of Sugar Cane and Other Grasses. By E. W. Brandes, Pathologist, Sugar Plant Investigations. Pp. 26, pls. 2, figs. 5. Contribution from the Bureau of Plant Industry. (Professional Paper.) Oct. 20, 1919. (Department Bulletin 829.) Price. 10 cents.

Of interest to sugar-cane grown generally.

MISCELLANEOUS.

- Regulations of the Secretary of Agriculture under the United States Warehouse Act of August 11, 1916, as amended July 24, 1919. Regulations for Grain Warehouses. Pp. 46. October, 1911. (Circular 141, Office of the Secretary.)
- Regulations of the Secretary of Agriculture under the United States Warehouse Act of August 11, 1916, as amended July 24, 1919. Revised Regulations for Cotton Warehouses, approved September 15, 1919. Pp. 41. October, 1919. (Circular 143, Office of the Secretary.)
- Rules and Regulations of the Secretary of Agriculture under the Food Products Inspection Law of July 24, 1919. Pp. 10. October, 1919. (Circular 144, Office of the Secretary.) Price, 5 cents.

Supersedes Circular No. 120, Office of the Secretary.

- Report of the Guam Agricultural Experiment Station, 1918. By C. W. Edwards, Animal Husbandman in Charge. Pp. 61, pls. 13. Oct. 14, 1919. Price, 10 cents.
- Fruit Growing on the Northern Great Plains. By Max Pfaender, Assistant in Dry-Land Agriculture Investigations. Pp. 12, figs. 7. Contribution from the Bureau of Plant Industry. (Department Circular 58.)
- Suggestions for Field Studies of Mammalian Life-Histories. By Walter P. Taylor, Assistant Biologist. Pp. 8. Contribution from the Bureau of Biological Survey, 1919. (Department Circular 59.)

- The Work of the Belle Fourche Reclamation Project Experiment Farm in 1918. By Beyer Aune, Farm Superintendent. Pp. 34, figs. 4. Contribution from the Office of Western Irrigation Agriculture, Bureau of Plant Industry. (Department Circular 60.)
- How Teachers May Use Publications on the Control of Diseases and Insect Enemies of the Home Garden. By Alvin Dille, Assistant in Agricultural Education. Pp. 4. Contribution from the States Relations Service, 1919. (Department Circular 68.)
- How Teachers May Use Farmers' Bulletin 876, Making Butter on the Farm. By E. H. Shinn, Assistant in Agricultural Education. Pp. 4. Contribution from the States Relations Service. (Department Circular 69.)

SERIALS.

Journal of Agricultural Research. (For sale only.) Vol. 18, No. 1. October 1, 1919. Contents: Notes on the Composition of the Sorghum Plant. (se Minn.—39.) By J. J. Willaman, R. M. West, D. O. Spriestersbach and G. E. Holm.—Simple Method for Measuring the Acidity of Cereal Products: Its Application to Sulphured and Unsulphured Oats. (sj E-11.) By Victor Birckner. Pp. 1-49, figs. 18. Price, 10 cents.

Same, Vol. 18, No. 2. October 15, 1919. Contents: Rate of Absorption of Soil Constituents at Successive Stages of Plant Growth. (sm Calif.-21.) By John Burd.—Relation of the Concentration and Reaction of the Nutrient Medium to the Growth and Absorption of the Plant. (sn Calif.-c22.) By D. R. Hoagland. Pp. 51-117, figs. 17. Price, 15 cents.

Note.—Volumes 1 to 4 of the Journal of Agricultural Research were published monthly, volumes 5 to 16 weekly, volume 17 monthly, and volume 18 is being issued semi-monthly. The Journal is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$1.50 per year for domestic circulation and \$2 for foreign circulation.

Experiment Station Record. Vol. 41, No. 2, August, 1919. E. W. Allen, Ph. D., Editor. Pp. 101–200. Price, 15 cents.

Note.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

The Monthly Crop Reporter. Vol. 5. No. 10, October, 1919. Pp. 97–108. (Bureau of Crop Estimates.) Price, 25 cents a year.

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock.

ANNOUNCEMENT.—Because of the small fund available for printing it has been found necessary to drop from the mailing list of the Monthly Crop Reporter all names of persons who are not actively cooperating with the United States Department of Agriculture. Persons whose names are dropped may subscribe for this publication through the Superintendent of Documents, Washington, D. C., at the domestic rate of 25 cents per year, and 40 cents per year to foreign addresses, payable only by postal money order or cash. No checks accepted.

Seed Reporter. Vol. 3, No. 4, October 11, 1919. Pp. 8. (Bureau of Markets.) For free distribution.

Contains data relative to stocks, receipts, movement, prices, qualities, outlook, etc., for field and vegetable seeds. Issued monthly.

Weekly News Letter, October, 1919.

Contains a weekly summary in popular form of the more important practical discoveries and recommendations of all bureaus of the department. Free list confined to departmental employees, official cooperators, and the press. May be purchased from the Superintendent of Documents, Government Printing Office, for 50 cents a year.

SERVICE AND REGULATORY ANNOUNCEMENTS-FOR SALE ONLY.

of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials, whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.

- Bureau of Animal Industry. No. 148. August, 1919. Pp. 83-95. Oct. 3, 1919. Price, 5 cents.
- Bureau of Biological Survey. No. 30. Migratory Bird Treaty, Act, and Regulations. Pp. 11. Oct. 17, 1919. Price, 5 cents.
- Bureau of Chemistry. Supplement 60. [N. J. 6451-6500.] Pp. 527-590. Oct. 18, 1919. Price, 10 cents.

SOIL SURVEYS.

- All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.
- Soil Survey of Drew County, Arkansas. By B. W. Tillman, F. A. Hayes, and F. Z. Hutton. Pp. 48, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Blackhawk County, Iowa. By W. E. Tharp, of the U. S. Department of Agriculture, and Horace J. Harper, of the Iowa Agricultural Experiment Station. Pp. 44, pls. 2, fig. 1, map. (From F. O. Soils, 1917.) Price. 45 cents.
- Soil Survey of Baltimore County Maryland. By William T. Carter and J. M. Snyder, of the U. S. Department of Agriculture, and O. C. Bruce, of the Maryland Agricultural Experiment Station. Pp. 42, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Chase County, Nebraska. By R. F. Rogers, of the U. S. Department of Agriculture, and Louis A. Wolfanger, of the Nebraska Soil Survey. Pp. 66, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Canadian County, Oklahoma. By E. H. Smies. Pp. 60, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

REF Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 47, No. 7. July, 1919. [October 6, 1919.] Pp. 447-522, figs. 42, charts 18. Price, 25 cents per copy, \$2.50 per year, payable to the Superintendent of Documents.

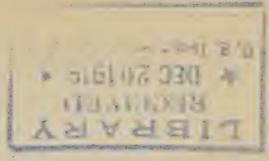
Special articles: Kansas tornadoes. By S. D. Flora.—A local storm at Aberdeen Proving Ground, Md., July 6, 1919. By O. Neumer.—Stereoscopic representation of wind movement aloft. By R. C. Lane and R. A. Wells.—Note on a mirage at sea. By M. S. Harloe.—The sun's influence on the diurnal variation of the atmospheric potential gradient. By W. F. G. Swann.—Radio direction changes and variations of audibility. By C. Kinsley and A. Sobey.—Diurnal variations in humidity. By W. J. Bennett.—Heavy rains at Tampico, Mexico, June 29-July 5, 1919. By S. A. Grogan.—Northers on the east coast of Mexico, their effects, and forecast by local observations. By S. A. Grogan.—Fog in central Ohio and its relation to subsequent weather changes. By H. H. Martin.—Highway weather service.—Weather in Cincinnati, Ohio, for 130 years. By W. C. Devereaux.—The Australian environment (especially as controlled by rainfall). By G. Taylor.—A new interpretation of the relationships of temperature and humidity to insect development. By W. D. Pierce.

Same, Supplement No. 15. Aerology No. 10. October 4, 1919. Contents: Free-Air Data at Broken Arrow, Okla., Drexel, Nebr., Ellendale, N. Dak., Groesbeck, Tex., Leesburg, Ga., and Royal Center, Ind., Aerological Stations, October to December, 1918, Inclusive. By the Aerological Division, Willis Ray Gregg, In Charge.—The Groesbeck Aerological Station. By Thomas J. Chancellor, Meteorologist.—The Leesburg Aerological Station. By Frank T. Cole, Observer.—Pp. 178, figs. 22. Price, 25 cents.

National Weather and Crop Bulletin. Nos. 29, 30, 31, 32, October, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly. Price, 25 cents a year.

Note.—This bulletin is furnished free of charge to public and educational institutions, libraries, newspapers, cooperative observers, weather correspondents, and to those who will post or display it for the general benefit of the public. To all others the price is 25 cents per year, payable to the Superintendent of Documents, Government Printing Office. Washington, 1), C.

EDWY B. REID, Chief, Division of Publications.



Name	
Rural Route or Street	Vo
City or Town	
State	· · · · · · · · · · · · · · · · · · ·

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

Washington, D. C., November 29, 1919.

MONTHLY LIST OF PUBLICATIONS.

[NOVEMBER, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as

the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His

office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

Note.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy unless otherwise noted.

Sweet-Potato Diseases. By L. L. Harter, Pathologist, Cotton and Truck Diseases. Pp. 24, figs. 15. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1059.)

A revision of Farmers' Bulletin 714 and suitable for general distribution.

Buckwheat. By Clyde E. Leighty, Agronomist in Charge of Eastern Wheat Investigations. Pp. 24, figs. 6. Contribution from the Bureau of Plant Industry. (Farmers' Bulletin 1062.)

Gives method of planting, fertilizing, and harvesting buckwheat.

152012°-19

The Flat-Headed Apple-Tree Borer. By Fred E. Brooks, Entomologist, Deciduous Fruit Insect Investigations. Pp. 15, figs. 13. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1065.)

Describes life history and habits of this pest and suggests methods for its control.

Judging Beef Cattle. By E. H. Thompson, Animal Husbandry Division. Pp. 23, figs. 9. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1068.)

For general distribution.

Tuberculosis in Live Stock. Detection, Control, and Eradication. By John A. Kiernan, Chief of Tuberculosis Eradication Division, and Alexander E. Wight, Assistant Chief. Pp. 31, figs. 21. Contribution from the Bureau of Animal Industry. (Farmers' Bulletin 1069.)

Suitable for general distribution.

The Bean Ladybird and Its Control. By F. II. Chittenden, Entomologist in Charge, Truck-Crop Insect Investigations. Pp. 7. figs. 3. Contribution from the Bureau of Entomology. (Farmers' Bulletin 1074.)

Describes a serious enemy to the bean crop in the southwest. Of especial interest to bean growers in Colorado, New Mexico, and Arizona.

DEPARTMENTAL BULLETINS-TECHNICAL.

ATThe publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

Commercial Dutch-Bulb Culture in the United States. By David Griffiths, Agriculturist, Office of Horticultural and Pomological Investigations, and H. E. Juenemann, Superintendent of the Bellingham Plant-Introduction Field Station, Office of Foreign Seed and Plant Introduction. Pp. 50, figs. 32. Contribution from the Bureau of Plant Industry. Nov. 22, 1919. (Department Bulletin 797.) `Price, 10 cents.

Describes the methods of planting, harvesting, packing, and shipping bulbs.

A Study of the Rots of Western Pine. By James R. Weir, Forest Pathologist, and Ernest E. Hubert, Scientific Assistant, Office of Investigations in Forest Pathology. Pp. 24. Contribution from the Bureau of Plant Industry. (Professional Paper.) Nov. 10, 1919. (Department Bulletin 799.) Price, 5 cents. Of interest to owners of timberlands in the northwestern States.

REPORTS.

Annual Report, Chief, Division of Accounts and Disbursements, 1919. Pp. 4.

Same, Chief, Bureau of Animal Industry, 1919. Pp. 63.

Same, Chief, Bureau of Biological Survey, 1919. Pp. 24.

Same, The Chemist, 1919. Pp. 24.

Same, The Entomologist, 1919. Pp. 27.

Same, Chief, Office of Farm Management, 1919. Pp. 6.

Same, Federal Horticultural Board, 1919. Pp. 32.

Same, Insecticide and Fungicide Board, 1919. Pp. 5.

Same, The Librarian, 1919. Pp. 15.

Same, Chief, Bureau of Markets, 1919. Pp. 35.

Same, Chief, Bureau of Plant Industry, 1919. Pp. 40.

Same, Chief, Division of Publications, 1919. Pp. 32.

Same, Director. States Relations Service, 1919. Pp. 37.

Same, Chief, Bureau of Soils, 1919. Pp. 11.

Same, The Solicitor, 1919. Pp. 29.

Same, Chief, Weather Bureau, 1919. Pp. 24.

MISCELLANEOUS.

- General Regulations Governing the Importation, Manufacture, Storage, and Distribution of Fertilizers and Fertilizer Ingredients. Pp. 4. Nov. 7, 1919. (Circular 145, Office of the Secretary.) Price, 5 cents.
- Address of D. F. Houston, Secretary of Agriculture, before the National Association of Commissioners of Agriculture. Chicago, Ill., November 11, 1919, Pp. 12. (Circular 146, Office of the Secretary.) Price, 5 cents.
- Address of D. F. Houston, Secretary of Agriculture, before the Association of American Agricultural Colleges and Experiment Stations. Chicago, Ill., November 12, 1919. Pp. 11. (Circular 147, Office of the Secretary.) Price, 5 cents.
- Poultry Houses. Pp. 8, figs. 3. Contribution from the Bureau of Animal Industry. 1919. (Department Circular 19.) Price, 5 cents.

 For members of boys' and girls' poultry clubs.
- Horticultural Exhibitions and Garden Competitions. By F. L. Mulford, Office of Horticultural and Pomological Investigations. Pp. 38, figs. 12. Contribution from the Bureau of Plant Industry, 1919. (Department Circular 62.)

SERIALS.

- Experiment Station Record. Vol. 41, No. 3, Abstract Number, Nov. 7, 1919. E. W. Allen, Ph. D., Editor. Pp. 201–300. Price, 15 cents.
- Same, Vol. 41, No. 4, September, 1919. Pp. 301-400. Price, 15 cents.
 - Note.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.
- The Monthly Crop Reporter. Vol. 5, No. 11, November, 1919. Pp. 109–120. (Bureau of Crop Estimates.) Price, 25 cents a year.

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock.

ANNOUNCEMENT.—Because of the small fund available for printing it has been found necessary to drop from the mailing list of the Monthly Crop Reporter all names of persons who are not actively cooperating with the United States Department of Agriculture. Persons whose names are dropped may subscribe for this publication through the Superintendent of Documents, Washington, D. C., at the domestic rate of 25 cents per year, and 40 cents per year to foreign addresses, payable only by postal money order or cash. No cheeks accepted.

Weekly News Letter, November, 1919.

Contains a weekly summary in popular form of the more important practical discoveries and recommendations of all bureaus of the department. Free list confined to departmental employees, official cooperators, and the press. May be purchased from the Superintendent of Documents, Government Printing Office, for 50 cents a year.

SOIL SURVEYS.

##All requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

- Soil Survey of Wapello County, Iowa. By E. C. Hall, of the U. S. Department of Iowa Agriculture, and E. I. Angell, of the Iowa Agricultural Experiment Station. Pp. 43, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Texas County, Missouri. By W. I. Watkins, Earl D. Fowler, and Henry I. Cohn, of the U. S. Department of Agriculture, and J. A. Machlis and H. H. Krusekopf, of the University of Missouri. Pp. 37, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Beaufort County, North Carolina. By W. B. Cobb and E. S. Vanatta, of the U. S. Department of Agriculture, and L. L. Brinkley, S. F. Davidson, and F. N. McDowell, of the North Carolina Department of Agriculture. Pp. 40, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.
- Soil Survey of Marlboro County, South Carolina. By Cornelius Van Duyne, W. E. McLendon, W. J. Latimer, and T. M. Morrison. Pp. 73, figs. 2, map. (From F. O. Soils, 1917.) Price, 15 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

APPublications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 47, No. 8. August, 1919. [Nov. 3, 1919.] Pp. 523-602, pls. 4, figs. 25, charts 9. Price, 25 cents per copy, \$2.50 per year, payable to the Superintendent of Documents.

Special articles: Effect of winds and other weather conditions on the flight of airplanes. By C. F. Brooks and others.—Free balloon in flight.—Balloon race from Fort Omaha through thunderstorms. By C. L. Meisinger.—Height at which sounds can be heard.—The constant-elevation free-balloon flights from Fort Omaha. By C. L. Meisinger.—The physiology of the aviator.—The composition of the atmosphere.—High lights of air travel.—The trans-Atlantic flight of the British dirigible "R. 34." By W. R. Gregg.—The geostrophic (gradient) winds of the North Atlantic.—Cloud frequencies with various winds.—Normal temperatures (daily): Are irregularities in the annual march of temperature persistent? By C. F. Marvin.—Literature concerning supposed recurrent irregularities in the annual march of temperature. By C. F. Talman.—Rainstorm of Aug. 13–14, 1919, on Maryland-Delaware peninsula. By A. H. Thiessen.—Waterspouts on Lake Erie, Aug. 19, 1919. By W. J. Willoughby.—Hot squall at Miami, Fla., May 6, 1917. By R. W. Gray.—A hill-top foehn. By C. F. Brooks.—Relation of clouds to weather in central Obio. By H. H. Martin.

National Weather and Crop Bulletin. Nos. 33, 34, 35, 36, November, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly. Price, 25 cents a year.

MINOTE.—This bulletin is furnished free of charge to public and educational institutions, libraries, newspapers, cooperative observers, weather correspondents, and to those who will post or display it for the general benefit of the public. To all others the price is 25 cents per year, payable to the Superintendent of Documents, Government Printing Office, Washington, D. C.

EDWY B. REID, Chief, Division of Publications. This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

Washington, D. C., December 31, 1919.

MONTHLY LIST OF PUBLICATIONS.

[DECEMBER, 1919.]

READ CAREFULLY BEFORE ORDERING.

Send no remittances to the U.S. Department of Agriculture.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

FARMERS' BULLETINS-FOR FREE DISTRIBUTION.

**ROTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy unless otherwise noted.

Onion Diseases and Their Control. By J. C. Walker, Assistant Pathologist, Office of Cotton, Truck, and Forage Crop Disease Investigations. Pp. 23, figs. 12. Contribution from the Bureau of Plant Industry. 1919. (Farmers' Bulletin 1060.)

For general distribution.

The Fowl Tick and How Premises May Be Freed of It. By F. C. Bishopp, Entomologist, Investigations of Insects Affecting the Health of Animals. Pp. 16, figs. 9. Contribution from the Bureau of Entomology. 1919. (Farmers' Bulletin 1070.)

For general distribution.

Growing Beef on the Farm. By F. W. Farley, Animal Husbandry Division. Pp. 23, figs. 11. Contribution from the Bureau of Animal Industry. 1919. (Farmers' Bulletin 1073.)

This publication is intended to give in a general way the practices which successful breeders and feeders of beef cattle have found most profitable and which experiments have proved to be most reliable.

Beet-Top Silage and Other By-products of the Sugar Beet. By James W. Jones, Agriculturist, Sugar-Plant Investigations. Pp. 24, figs. 12. Contribution from the Bureau of Plant Industry. 1919. (Farmers' Bulletin 1095.)

A discussion of the more profitable methods of utilizing the tops and other byproducts of the sugar beet.

157225°—20

DEPARTMENTAL BULLETINS-TECHNICAL.

In the publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information, as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

Construction and Fire-Protection of Cotton Warehouses. By J. M. Workman. Pp. 79, pls. 34, plans and diagrams. Contribution from the Bureau of Markets. (Professional Paper.) Dec. 11, 1919. (Department Bulletin 801.) Price, 50 cents.

Presents definite suggestions in regard to construction of buildings and fire protection based on desirable principles and practices.

Quality and Value of Important Types of Peat Material. By Alfred P. Dachnowski, Physiologist, Soil-Fertility Investigations. Pp. 40. Contribution from the Bureau of Plant Industry. (Professional Paper.) Dec. 29, 1919. (Department Bulletin 802.) Price, 10 cents.

A classification of peat based upon its botanical composition and physical and chemical characteristics that will aid in solving the problem of peat utilization.

Two Leafhoppers Injurious to Apple Nursery Stock. By A. J. Ackerman, Scientific Assistant, Deciduous Fruit Insect Investigations. Pp. 35, pls. 5, figs. 2, Contribution from the Bureau of Entomology. (Professional Paper.) Dec. 15, 1919. (Department Bulletin 805.) Price, 10 cents.

Describes the common apple leafhopper and the rose leafhopper and suggests methods of control.

- Peaches: Production Estimates and Important Commercial Districts and Varieties. By H. P. Gould, Bureau of Plant Industry, and Frank Andrews, Bureau of Crop Estimates. Pp. 35, figs. 7. Contribution from the Bureau of Plant Industry and Bureau of Crop Estimates. Dec. 8, 1919. (Department Bulletin 806.) Price, 5 cents.
- A System of Bookkeeping for Grain Elevators. By B. B. Mason, Assistant in Market Business Practice, Frank Robotka, Field Agent in Market Business Practice, cooperating with the College of Agriculture of the University of Minnesota, and A. V. Swarthout, Investigator in Market Business Practice, Pp. 53, blank forms. Contribution from the Bureau of Markets. Dec. 5, 1919, (Department Bulletin 811.) Price, 20 cents.

Supersedes Department Bulletin 362.

REPORTS.

Annual Report, Secretary of Agriculture, 1919. Pp. 48.

Same, Chief of the Bureau of Crop Estimates, 1919. Pp. 11.

Same, The Forester, 1919. Pp. 34.

Same, The Chief of the Bureau of Public Roads, 1919. Pp. 36.

MISCELLANEOUS.

A Policy of Forestry for the Nation. By Henry S. Graves, Forester. Pp. 11. December, 1919. (Circular 148, Office of the Secretary.) Price, 5 cents. The statement of a policy presented before Forestry Conferences of 1919.

Trend of the Butter Industry in the United States and Other Countries. Simple Charts with Interpretations. By T. R. Pirtle, Dairy Division. Pp. 24, figs. 26. Contribution from the Bureau of Animal Industry. December, 1919. (Department Circular 70.) Price, 5 cents.

Trend of the Cheese Industry in the United States and Other Countries. Simple Charts with Interpretations. By T. R. Pirtle, Dairy Division. Pp. 23, figs. 25. Contribution from the Bureau of Animal Industry, 1919. (Department Circular 71.) Price, 5 cents.

SERIALS.

Journal of Agricultural Research. (For sale only.) Vol. 18, No. 3. Nov, 1, 1919. Contents: Natural Carbonates of Calcium and Magnesium in Relation to the Chemical Composition, Bacterial Contents, and Crop-Producing Power of Two Very Acid Soils. (sk Ind.-6.) By S. D. Conner and H. A. Noyes.—Recent Studies on Sclerotium rolfsii Sacc. (so Tex.-4.) By J. J. Tauben-

haus.—Effect of Variation in Moisture Content on the Water-Extractable Matter of Soils. (sp Calif. 23.) By J. B. Martin and A. W. Christie.—Pathology of Dourine with Special Reference to Microscopic Changes in Nerve Tissues and Other Structures. (sq A-50.) By Robert J. Formad.—Yellow-Berry in Hard Winter Wheat. (sr Kans. 19.) By Herbert F. Roberts.—Note on the European Corn Borer (Pyrausta nubilalis Hübner) and Its Nearest American Allies, with Description of Larvæ, Pupæ, and One New Specials. (d K. 77.) By Carl Heinrich. Pp. 119-178, pls. 11, figs. 3. Price, 20 cents.

Same, Vol. 18, No. 4. Nov. 15, 1919. Contents. Bacterial Bright (ss Wis. 16.) By Florence M. Coerper.—Do Mold Spores Contain Enzyms? (sv La. 1.) By Nicholas Kopeloff and Lillian Kopeloff.—Nature and Control of Apple-Scald. (sw G-179.) By Charles Brooks, J. S. Cooley, and D. F. Fisher. Pp. 179-240, pls. 8, figs. 2. Price, 30 cents.

Same, Vol. 18, No. 5. Dec. 1, 1919. Contents: Nitrogen Metabolism of Two Year-Old Steers. (sx Ill. 9.) By Sleeter Bull and H. S. Grindley.—Development of the Pistillate Spikelet and Fertilization in Zea mays L. (st Kans.-20.) By Edwin C. Miller.—Response of Citrus Seedlings in Water Cultures to Salts and Organic Extracts. (su G-180.) By J. F. Breazeale.—Physiological Study of the Parasitism of Pythium debaryanum Hesse on the Potato Tuber. (sy G-181.) By Lon A. Hawkins and Rodney B. Harvey. Pp. 299-345, figs. 8. Price, 10 cents.

Same, Vol. 18, No. 6. Dec. 15, 1919. Contents: Losses of Organic Matter in Making Brown and Black Alfalfa. (sl Kans.-21.) By C. O. Swanson, L. E. Call, and S. C. Salmon.—Cotton Rootrot Spots. (sz G-182.) By C. S. Scofield.—Apple-Grain Aphis. (ta K-78.) By A. C. Baker and W. F. Turner.—Sunflower Silage. (tb Idaho-3.) By R. E. Neidig and Lulu E. Vance.— Effect of Oxidation of Sulphur in Soils on the Solubility of Rock Phosphate and on Nitrification. (tc Ky.-9.) By O. N. Shedd. Pp. 241-298, pls. 19, figs. Price, 10 cents.

Note.—Volumes 1 to 4 of the Journal of Agricultural Research were published monthly, volumes 5 to 16 weekly, volume 17 monthly, and volume 18 is being issued semi-monthly. The Journal is distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$1.50 per year for domestic circulation and \$2 for foreign circulation.

Experiment Station Record. Vol. 41, No. 5, October, 1919. E. W. Allen, Ph. D., Editor. Pp. 401-500. Price, 15 cents.

Note.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, 10 numbers each, at \$1 a volume.

Vol. 5, No. 12, December, 1919. Pp. 121-140. The Monthly Crop Reporter. (Bureau of Crop Estimates.) Price, 25 cents a year.

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock; also the index to volume 5.

ANNOUNCEMENT.—Because of the small fund available for printing it has been found necessary to drop from the mailing list of the Monthly Crop Reporter all names of persons who are not actively cooperating with the United States Department of Agriculure. Persons whose names are dropped may subscribe for this publication through the Superintendent of Documents, Washington, D. C., at the domestic rate of 25 cents per year, and 40 cents per year to foreign addresses, payable only by postal money order or cash. No checks accepted.

Weekly News Letter, December, 1919.

Contains a weekly summary in popular form of the more important practical discoveries and recommendations of all bureaus of the department. Free list confined to departmental employees, official cooperators, and the press. May be purchased from the Superintendent of Documents, Government Printing Office, for 50 cents a year.

SERVICE AND REGULATORY ANNOUNCEMENTS-FOR SALE ONLY.

These contain only information, instructions, and notices governing the enforcement of the food and drugs act, meat inspection, 28-hour, and quarantine laws, and the various regulations of the department. Issued monthly by certain bureaus. Free distribution is limited to persons in the employ of the department, to public officials, whose duties render it necessary for them to have such information, to journals especially concerned, and to manufacturers and firms whose business is affected by same. Others desiring copies are respectfully referred to the Superintendent of Documents, Government Printing Office, who has them for sale only, at prices noted.

Bureau of Animal Industry. No. 150. October, 1919. Pp. 109-117. Dec. 11, 1919. Price, 5 cents.

Bureau of Animal Industry. No. 151. November, 1919. Pp. 119-129. Dec. 29, 1919. Price, 5 cents.

Biological Survey. No. 31. Pp. 1. Dec. 19, 1919. Price, 5 cents.

Bureau of Chemistry. Supplement No. 61. [N. J. 6501-6550.] Pp. 60. Dec. 29, 1919. Price, 10 cents.

Federal Horticultural Board. No. 65. August, September, October, 1919. Pp. 93-115. Dec. 12, 1919. Price, 5 cents.

Bureau of Soils. No. 1. Pp. 1. Dec. 23, 1919. Price, 5 cents.

SOIL SURVEYS.

ATAll requests for soil surveys are referred to the Bureau of Soils for attention, the distribution of same being controlled by that bureau.

Soil Survey of Burke County, Georgia. By E. T. Maxon, C. E. Deardorff, W. A. Rockie, and J. M. Snyder. Pp. 31, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

Soil Survey of Washington County, Maryland. By R. T. Avon Burke, of the U. S. Department of Agriculture, and Herbert F. McCall, of the Maryland Agricultural Experiment Station. Pp. 46, fig. 1, map. (From F. O. Soils, 1917.) Price, 15 cents.

PUBLICATIONS OF THE WEATHER BUREAU.

REPublications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. Vol. 47, No. 9. September, 1919. [Dec. 16, 1919.] Pp. 608-690, figs. 39, charts 35. Price, 25 cents per copy, \$2.50 per year. Payable to the Superintendent of Documents.

Payable to the Superintendent of Documents.

Special: Rainfall interception. By R. E. Horton.—Seasonal distribution of precipitation and its frequency and intensity in the United States. By J. B. Kincer.—Some characteristics of the rainfall of the United States. By (R. DeC. Ward).—Historical data on the variation of rainfall in Chile. By (C. E. P. Brooks).—Tornado within a hurricane area, Goulds, Fla., September 10, 1919. By R. W. Gray.—Tornado near Hobbs, N. Mex., September 19, 1919. By E. H. Byers.—Heavy rainfall in New Mexico, September 14–17, 1919. By C. E. Linney.—Influence of tropical cyclones on the weather in the Valley of Mexico.—Early Texas coast storms. By B. C. Stuart.—The "Quantico" or Christmas typhoon of 1918. By J. Corornas.—Characteristics of the free atmosphere. By W. H. Dines.—Vertical temperature distribution in the lowest five kilometers of cyclones and anticyclones. By W. R. Gregg.—General movements of the atmosphere. By W. R. Gregg.—Superposition of aerial currents in the peninsula of Cape Verde, Senegal. By H. Hubert.

National Weather and Crop and Snow and Ice Bulletin. Nos. 37, 38, 39, 40, 41, December, 1919, reporting temperature, rainfall, and crop conditions throughout the United States. Issued weekly. Price, 25 cents a year.

Note.—This bulletin is furnished free of charge to public and educational institutions, libraries, newspapers, cooperative observers, weather correspondents, and to those who will post or display it for the general benefit of the public. To all others the price is 25 cents per year, payable to the Superintendent of Documents, Government Printing Office, Washington, D. C.

EDWY B. REID, Chief, Division of Publications.